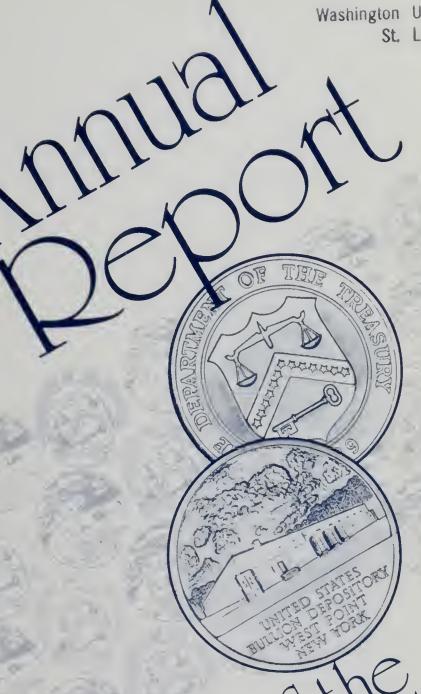
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DEPARTMENT OF THE TREASURY DOCUMENT NO. 3277

Director of the Mint

LETTER OF TRANSMITTAL

DEPARTMENT OF THE TREASURY,

BUREAU OF THE MINT,

Washington, D.C. May 16, 1979.

SIR: I have the honor to transmit to you the One Hundred and Sixth Annual Report of the Director of the Mint, for the fiscal year ended September 30, 1978. This submission is in compliance with Section 345 of the Revised Statutes of the United States, 2d edition (1878) 31 U.S.C. 253.

STELLA B HACKEL, Director of the Mint.

HON. W. MICHAEL BLUMENTHAL, Secretary of the Treasury.

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CONTENTS

MINT OPERATIONS, FISCAL YEAR 1978

	Page
Organization	6
Administration	13
Field Installations	
The Philadelphia Mint	
The Denver Mint	15
The West Point Bullion Depository	
The Old Mint (San Francisco)	16
The U.S. Assay Office at San Francisco	
The Fort Knox Bullion Depository	17
The U.S. Assay Office at New York	. 17
EXHIBITS	
1. Press release, October 3, 1977, concerning addition of President Carter's medal	
to National Medals List	
B. Hackel to be Director of the Mint	. 21
3. Transcript of proceedings, November 3, 1977, before the Senate Committee on	
Banking, Housing and Urban Affairs concerning the nomination of Stella	22
Hackel, of Vermont, to be Director of the United States Mint	. 22
4. Press release, January 10, 1978, concerning early completion of shipment of 1977 proof coin sets	. 26
5. Press release, January 24, 1978, concerning results of Mint survey of	
numismatic customers	. 26
6. An act to provide for the striking of a national medal to commemorate the bicentennial of an outstanding historic event or personality during 1777	. 27
7. Press release, February 16, 1978, concerning sale of 1977 Assay Commission	. 21
Medal to the public	. 28
8. Statement by Director of the Mint, February 18, 1978, before the American	. 20
Numismatic Association Winter Convention, Colorado Springs, Colorado	. 28
9. Press release, March 29, 1978, concerning acceptance of orders for 1978 proof	
coin sets	. 31
10. Press release, May 1, 1978, concerning first shipments of 1978 proof coin sets	. 31
11. Statement by the Director of the Mint, May 17, 1978, before the Subcommittee	
on Historic Preservation and Coinage of the House Committee on Banking,	
Finance and Urban Affairs	. 32
12. Revocation of regulations prohibiting the exportation, melting, or treating of	
one-cent coins, May 31, 1978	. 34
13. Press release, June 9, 1978, concerning revocation of the one-cent coin melting	25
ban	. 35
14. Press release, June 26, 1978, concerning appointment of George B. Wright as Officer in Charge of the Fort Knox Gold Bullion Depository	. 35
15. Press release, June 30, 19/8, concerning closing of ordering period for 1978	. 33
proof coin sets	35
16. Statement by the Director of the Mint, July 17, 1978, before the Senate	. 55
Committee on Banking, Housing and Urban Affairs	. 36
17. Press release, July 20, 1978, concerning completion of two additional Chief	
Justice medals	. 40
8. Statement by Assistant Director of the Mint for Technology Alan J. Goldman,	
August 25, 1978, before the Senate Committee on Banking, Housing and	
Urban Affairs	. 40
9. Press release, August 28, 1978, concerning acceptance of orders for 1978	
uncirculated coin sets	. 41

	Pa TABLES	ge
	TABLES	
	J.S. coins manufactured, fiscal year 1978	
2 10	September 1978	
	Production of Kennedy half dollars, fiscal years 1964–78	
	Specifications, metallic composition, and designs of U.S. coins	
6. S	Consumption of metals in the manufacture of U.S. coins, fiscal year 1978	
	circulation, fiscal years 1976, 1977, and 1978	
	nventories of U.S. coins, September 30, 1977, and September 30, 1978	
	Location of U.S. fractional coins on selected dates, June 1970-September 1978	
	Location of U.S. clad dollars on selected dates, July 1971-September 1978	53
	Summary of uncurrent U.S. coins withdrawn from circulation fiscal years 1977 and 1978	
11. N	Medals produced by the Philadelphia Mint, fiscal years 1976-78	55
12. N	Medals produced by the Denver Mint, fiscal years 1976–78	61
13. N	Medals produced by the San Francisco Assay Office, fiscal years 1976–78	62
14. N	Medal produced by the Old San Francisco Mint, fiscal years 1976–78	62
15. F	Foreign coins manufactured by U.S. mints, fiscal year 1978	63
16. C	Gold transactions of the Bureau of the Mint, fiscal year 1978	64
	Gold transactions of the Bureau of the Mint, fiscal year 1978, dollar value	
	Summary of silver receipts, issues, and balances of the Bureau of the Mint, fiscal years 1934–78	
19 S	Silver bullion transactions of the Bureau of the Mint, fiscal year 1978	67
	Monetary metals operated on and operating gains and losses of the mints and assay offices, 1978	
21. R	Refined gold and silver produced by the electrolytic process at the New York Assay Office, fiscal year 1978, by months	
22. S	Stocks of unrefined and semiprocessed gold and silver bullion held at the mints and assay offices, Sept. 30, 1978	
23. I	Detail of revenues deposited into the general fund of the Treasury by the	
	Bureau of the Mint, fiscal year 1978	71
24. A	Analysis of monetary assets and liabilities of the Bureau of the Mint, Sept. 30,	
25 N	Number of employees of the Bureau of the Mint, fiscal year 1978	74
	J.S. coins manufactured, calendar year 1977	
	Consumption of metals in the manufacture of U.S. coins, calendar year 1977	
	Foreign coins manufactured by U.S. mints, calendar year 1977	
	summary of foreign coinage by U.S. mints, by country, through Dec. 31, 1977	
	Summary of foreign coinage by U.S. mints, by calendar year, through Dec. 31, 1977	
31 G	Fold transactions of the Bureau of the Mint, calendar year 1977	
	Gold transactions of the Bureau of the Mint, calendar year 1977, dollar value	
	ilver bullion transactions of the Bureau of the Mint, calendar year 1977	82
34. A	Analysis of monetary assets and liabilities of the Bureau of the Mint, Dec. 31, 1977	83
	U.S. GOLD, SILVER, AND COINAGE METALS	
U.S.	mine production of gold and silver, 1978	87
	l and silver issued for nonmonetary use	
	es of gold, silver, and coinage metals	

THE WORLD'S MONETARY STOCKS OF GOLD, SILVER, AND COINS IN 1977	Page
Government Coinage Mints of the World	110
Summary-Coinage of Nations, 1977	112
Coinage of Nations and World Coins, 1977:	
Explanatory notes on tables	115
Details on coinage: Country tables	116
World monetary units, 1977	
Silver coins withdrawn from circulation, 1977	250
Gold and silver consumed for industrial, professional, and artistic use, 1977	250
World production of gold, 1975-77	252
World production of silver, 1975-77	253
World monetary stocks of gold bullion and coin at the end of 1977	255
World monetary stocks of silver bullion and coin at the end of 1977	256
FAO national coin issues, through Dec. 31, 1977	260
INDEX	281

Secretaries of the Treasury, 1834-1978

The U.S. Mint was under the supervision of the Secretary of State from its establishment in 1792 to 1799. It then became an independent agency reporting directly to the President of the United States. The act of March 3, 1835 (4 Stat. 774) stated that the Director of the Mint was to direct the business of the Mint "—subject to the approbation of the Secretary of the Treasury—." Later the Director was authorized to report to the President of the United States and to the Secretary of the Treasury. The act of February 12, 1873 (31 U.S.C. 251, 253) established the Mint as a bureau within the Department of the Treasury.

Term of service			vice		_ Secretaries of the Treasury	Served under—	
From— To—			_ Secretaries of the Treasury	President			
July	1, 1834	Mar.	. 3,	1841	Levi Woodbury, New Hampshire		
Mar.	6, 1841			1841	Thomas Ewing, Ohio		
	13, 1841	Mar.		1843	Walter Forward, Pennsylvania		
Mar.	8, 1843	May		1844	John C. Spencer, New York ¹		
July	4, 1844			1845	Geo. M. Bibb, Kentucky		
Mar.		Mar.		1849	Robert J. Walker, Mississippi		
Mar.	8, 1849	July		1850	Wm. M. Meredith, Pennsylvania		
July		Mar.		1853	Thos. Corwin, Ohio		
Mar.	7, 1853	Mar.		1857	James Guthrie, Kentucky		
Mar.	7, 1857	Dec.		1860	Howell Cobb, Georgia		
_	12, 1860	Jan.		1861	Philip F. Thomas, Maryland		
	15, 1861	Mar.		1861	John A. Dix, New York		
Mar.	7, 1861			1864	Salmon P. Chase, Ohio		
July	5, 1864	Маг.		1865	Wm. P. Fessenden, Maine		
Mar.	9, 1865	Маг.		1869	Hugh McCulloch, Indiana ²		
	12, 1869	_		1873	Geo. S. Boutwell, Massachusetts		
	17, 1873	June		1874	Wm. A. Richardson, Massachusetts		
June	4, 1874			1876	Benj. H. Bristow, Kentucky		
July	7, 1876	Mar.	,	1877	Lot M. Morrill, Maine		
_	10, 1877	Mar.		1881	John Sherman, Ohio		
Mar.	8, 1881	_		1881	Wm. Windom, Minnesota ³		
	14, 1881			1884	Chas. J. Folger, New York		
	25, 1884			1884	Walter Q. Gresham, Indiana		
	31, 1884	Mar.		1885	Hugh McCulloch, Indiana ²		
Mar.	8, 1885		- 1	1887	Daniel Manning, New York		
Apr.	1, 1887	Mar.		1889	Chas. S. Fairchild, New York		
Mar.	7, 1889	Jan.		1891 1893	Wm. Windom, Minnesota ³		
	25, 1891	Mar. Mar.			John G. Carlisle, Kentucky		
Маг. Маг.	7, 1893 6, 1897	_	,	1897 1902	Lyman J. Gage, Illinois		
Feb.	1, 1902	Jan. Mar.		1902	L.M. Shaw, Iowa		
Mar.	4, 1907	Mar.		1909	George B. Cortelyou, New York		
маг. Маг.		Mar.		1913	Franklin MacVeagh, Illinois		
Mar.	6, 1913			1918	W. G. McAdoo, New York		
	16, 1918	Feb.		1920	Carter Glass, Virginia		
Peb.	2. 1920	Mar.		1921	David F. Houston, Missouri		
Маг.	4, 1921		,	1932	Andrew W. Mellon, Pennsylvania		
	13, 1932	Mar.		1933	Ogden L. Mills, New York		
lar.	4, 1933			1933	William H. Woodin, New York		
an.	1, 1934			1945	Henry Morgenthau, Jr., New York		
	23, 1945	June			Fred M. Vinson, Kentucky		
	25, 1946	Jan.			John W. Snyder, Missouri		
	21, 1953	July			George M. Humphrey, Ohio		
	29, 1957	Jan.		1961	Robert B. Anderson, Connecticut		
	21, 1961	Apr.		1965	Douglas Dillon, New Jersey		
	1, 1965			1968	Henry H. Fowler, Virginia		
	21, 1968	Jan.		1969	Joseph W. Barr, Indiana		
	22, 1969	Feb.			David M. Kennedy, Illinois		
	11, 1971	June			John B. Connally, Texas		
	12, 1972	May			George P. Shultz, New York		
May	8, 1974	Jan.	'		William E. Simon, New Jersey		
-	23, 1977		20,		W. Michael Blumenthal, Michigan		
all.	23, 17//				w. whenaer blumenthal, whenigan	. Carter	

¹Spencer resigned as Secretary of the Treasury May 2, 1844; McClintock Young (Chief Clerk), was ad interim Secretary of the Treasury from May 2 to July 3, 1844.

²Hugh McCulloch was Secretary from Mar. 9, 1865, to Mar. 3, 1869, and from Oct. 31, 1884, to Mar. 7, 1885.

William Windom was Secretary from Mar. 8, 1881, to Nov. 13, 1881, and also from Mar. 7, 1889, to Jan. 29, 1891.

Directors of the United States Mint 1792-1978

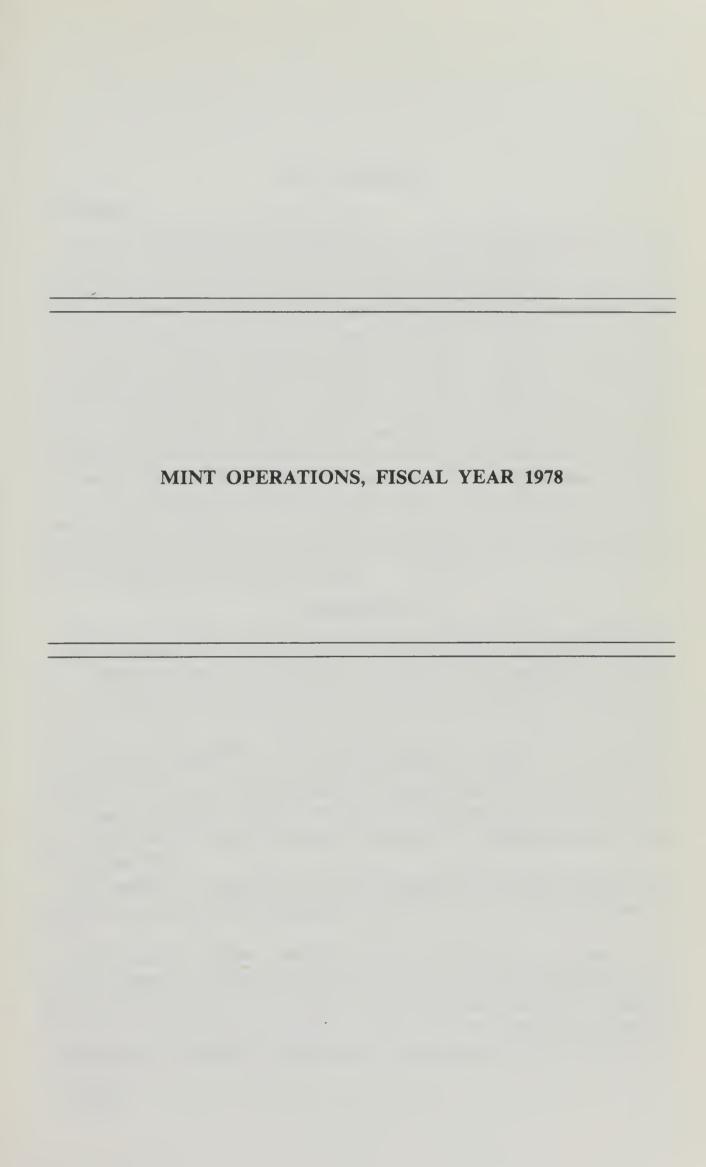
The Director of the Mint is appointed by the President of the United States, by and with the advice and consent of the Senate. The length of the term of office was not fixed by law from 1792 to 1873. The Act of February 12, 1873, fixed the term of the Director at 5 years. However, there is no restriction on the reappointment of Directors.

- Term of service			e	Directors of the Mint		
From-		From— T				
Apr.	1792	June	1795	David Rittenhouse, Pennsylvania.		
July	1795	Oct.	1795	Henry William de Saussure, South Carolina.		
Oct.	1795	July	1805	Elias Boudinot, New Jersey.		
Jan.	1806	July	1824	Robert Patterson, Pennsylvania.		
July	1824	July	1835	Samuel Moore, Pennsylvania.		
July	1835	July	1851	Robert Maskell Patterson, Pennsylvania.		
July	1851	Apr.	1853	George N. Eckert, Pennsylvania.		
Apr.	1853	May	1853	Thomas M. Pettit, Pennsylvania.1		
June	1853	Apr.	1861	James Ross Snowden, Pennsylvania.		
May	1861	Sept.	1866	James Pollock, Pennsylvania.		
Oct.	1866	Apr.	1867	William Millward, Pennsylvania.2		
Apr.	1867	Apr.	1869	Henry Richard Linderman, Pennsylvania.		
May	1869	Mar.	1873	James Pollock, Pennsylvania.		
Apr.	1873	Dec.	1878	Henry Richard Linderman, Pennsylvania.		
Feb.	1879	June	1885	Horatio C. Burchard, Illinois.		
July	1885	Oct.	1889	James P. Kimball, Pennsylvania.		
Oct.	1889	May	1893	Edward O. Leech, District of Columbia.		
Nov.	1893	Feb.	1898	Robert E. Preston, District of Columbia.		
Feb.	1898	July	1907	George E. Roberts, Iowa.		
Sept.	1907	Nov.	1909	Frank A. Leach, California.		
Nov.	1909	June	1910	A. Piatt Andrew, Massachusetts.		
July	1910	Nov.	1914	George E. Roberts, Iowa.		
Mar.	1915	July	1916	Robert W. Woolley, Virginia.		
Sept.	1916	Feb.	1917	F.J.H. von Engelken, Florida.		
Mar.	1917	Mar.	1922	Raymond T. Baker, Nevada.		
Mar.	1922	Sept.	1923	F.E. Scobey, Texas.		
Nov.	1923	May	1933	Robert J. Grant, Colorado.		
May	1933	Apr.	1953	Nellie Tayloe Ross, Wyoming.		
July	1954	Jan.	1961	William H. Brett, Ohio.		
Oct.	1961	Aug.	1969	Eva Adams, Nevada.		
Sept.	1969	Feb.	1977	Mary Brooks, Idaho.		
Nov.	1977			Stella B. Hackel, Vermont.		

¹Died in office.

²President Andrew Johnson appointed William Millward Director in October 1866 while the Senate was in recess. The President forwarded his nomination for the position of Director in a letter to the Senate dated Jan. 2, 1867. The Senate rejected the nomination on Jan. 26, 1867. However, William Millward remained in the Mint until the confirmation of Director Linderman.







Mint Operations

Introduction

The Mint became an operating bureau of the Department of the Treasury in 1873, pursuant to the Coinage Act of 1873 (31 U.S.C. 251). All U.S. coins are manufactured at Mint institutions. The Bureau of the Mint distributes the coins to and among the Federal Reserve banks and branches, which in turn release them, as required, to commercial banks. In addition, the Mint maintains physical custody of Treasury gold and silver assets; handles various deposit transactions including inter-Mint transfers of bullion; refines and processes gold and silver bullion; and, moves, places into storage, and releases them from custody for such purposes as authorized. Functions performed by the Mint on a reimbursable basis during the fiscal year 1978 included: The manufacture and sale of the regular annual proof and uncirculated coin sets; the manufacture and sale of medals of a national character, as well as the sale of Bicentennial proof and uncirculated coin sets; and, as schedules permitted, the manufacture of foreign coins.

Organization

The headquarters of the Bureau of the Mint is located in Washington, D.C. The operations necessary for the conduct of the business of the Mint are performed at seven field facilities. Mints are located in Philadelphia, Pa. and Denver, Colo.; assay offices are in New York, N.Y. and San Francisco, Calif.; bullion depositories are situated at Fort Knox, Ky. (for gold) and West Point, N.Y. (for silver); the Old Mint, San Francisco, houses the Mint Data Center, the Mint Museum, and a numismatic order processing operation. The U.S. Assay Office, San Francisco, operates as a mint. The West Point Depository continued to produce coins during fiscal year 1978.

The numbers of employees in the headquarters and field installations decreased from 2,525 on September 30, 1977, to 2,455 on September 30, 1978.

On October 26, 1977,¹ President Carter submitted to the Senate the name of Stella B. Hackel of Rutland, Vermont, to be the Director of the Mint. On November 3, 1977, Mrs. Hackel appeared before the Senate Committee on Banking, Housing and Urban Affairs.² The Senate confirmed Mrs. Hackel's nomination on November 4, 1977. On Novem-

¹ See exhibit 2.

² See exhibit 3.

ber 9, 1977, the President signed the commission appointing Mrs. Hackel Director of the Mint. The accompanying illustration shows the Director of the Mint and the Secretary of the Treasury immediately after she had taken her oath of office.



Director of the Mint Hackel and Secretary of the Treasury Blumenthal

On March 15, 1978, the Senate confirmed the nominations of Evelyn T. Davidson, Shallie M. Bey, Jr., and Manuel A. Sanchez, Jr. to be, respectively, superintendents of the Denver and Philadelphia Mints and the United States Assay Office at New York.

Staff Operations

The Continuing Committee for the Audit of U.S.-owned gold located at the various Mint offices, had been established during fiscal 1976. The Committee was established pursuant to an order from the Secretary of the Treasury. It consists of one representative each from the Bureau of the Mint, the Bureau of Government Financial Operations, and the Federal Reserve Bank of New York. General Accounting Office representatives participate in the audits as observers. Under the Commit-

tee's program, an audit was conducted at each of the four Mint depositories where gold is stored (Fort Knox, Ky.; U.S. Assay Office, New York; U.S. Assay Office, San Francisco; and the Denver Mint). By September 30, 1978, about 50 percent of the gold stored at Mint depositories had been audited and found intact. The continuing audit is planned to provide a complete audit for all U.S.-owned gold over a 10-year cycle ending in 1984.

During the fiscal year audits were made of storeroom operations, payrolls, severance payments, numismatic coin order processing, travel and training expenditures, payrolls, appropriation accounting, contract proposals, and the safety program. Audit reports concerning systems problems with TPPIS were issued to the Treasury Department Office of Audit for their information, since responsibility for the system was transferred to the Office of the Secretary during the fiscal year. These reports were related to problems with severance payments to Mint employees processed by TPPIS, the management of TPPIS, and the reconciliation of TPPIS reports with corresponding accounting records.

Internal audits during the fiscal year contributed to further strengthening of internal controls and accounting and reporting systems. Monetary savings attributed to audits during the year amounted to more than \$57 thousand.

A revised audit policy statement, approved by the Director of the Mint, was incorporated into the Mint Regulations. The revised regulations strengthen internal audit in the Mint and broaden the scope of audit coverage.

A lateral review of safety programs at Mint industrial facilities identified a need for increased safety awareness, more effective safety training, and closer monitoring of continuation of pay benefits to injured employees to ensure that injury claims are not overstated.

The function of the Mint security program is to provide appropriate and continuous protection for all employees and assets under the jurisdiction of the Bureau of the Mint. This is accomplished by the Mint Security Force, supported by extensive and sophisticated electronic and mechanical alarm systems, closed-circuit television coverage, and special vaults or other controlled locking devices. Security staffs also monitor the Bureau's personnel security clearance program.

The Mint continued to utilize the high quality police-type basic training of the Federal Law Enforcement Training Center, Glynco, Georgia. During the year, 37 Mint security officers completed the 5-week course at this facility. The principal security supervisor at the Philadelphia Mint completed the 7-week Criminal Investigators Course at Glynco.

The new computerized closed-circuit television and security alarm systems at the Philadelphia Mint became operational during the fiscal year.

During October 1977, a week-long Security Officers' Conference was held. Representatives from the seven field offices and headquarters reviewed the Mint's total security program for effectiveness and needed policy decisions.

During May 1978 a refinery worker at the New York Assay Office was arrested by Mint security while attempting to remove a quantity of gold from the building. The U.S. Secret Service conducted a vigorous investigation of the theft and arrested an outside accomplice for collusion in these violations.

Security cost surveys were initiated in Philadelphia and Denver relative to the possible use by the Mint of off-site facilities at Frankford and Rocky Mountain arsenals for storage and/or limited coin manufacturing operations.

During the fiscal year the Personnel Division, Office of Administration, was established as an independent Office of Personnel reporting directly to the Director of the Mint. Personnel Office functions were reorganized into separate operating and staff elements and title changes were made to designate functional responsibilities.

A new 3-year labor agreement between the Bureau of the Mint and the Mint council (AFGE) was signed by both parties on November 2, 1977. It became effective on December 15, 1977.

Coinage Activities

Domestic coinage

In April 1978 Secretary of the Treasury Blumenthal transmitted to the Congress proposed legislation to authorize a smaller dollar coin to replace the Eisenhower dollar coin in circulation. On May 17, 1978,³ the Director of the Mint testified on the technical aspects of the dollar coin proposal before the Subcommittee on Historic Preservation and Coinage of the House Committee on Banking, Finance and Urban Affairs.

On July 17, 1978, the Director testified before the Senate Committee on Banking, Housing and Urban Affairs in support of S. 3036. This legislation proposed a smaller dollar coin bearing the likeness of Susan B. Anthony on the obverse. The basic purpose of the new coin was to improve our coinage system by authorizing a useful coin for commerce and trade.

On August 22, 1978, the Senate approved S. 3036 authorizing the Secretary to mint and issue the smaller dollar coin bearing the portrait of

³ See exhibit 11.

See exhibit 16.



The Susan B. Anthony dollar coin

Susan B. Anthony on the obverse and the Apollo 11 eagle design on the reverse. An identical bill was approved by the House of Representatives on September 26, 1978. President Carter approved the legislation on October 10, 1978 (Public Law 95–447).

The Anthony dollar will be a clad coin. The cladding is an alloy of 75 percent copper, 25 percent nickel. It will constitute 50 percent of the total thickness of the coin. The core will be pure copper. The coin will weigh 8.1 grams and have a diameter of 26.5 millimeters. The design has an 11-sided border on both sides of the coin within the outer circular configuration, which will make it distinguishable by touch, as well as sight.

Specifications for the size, alloys, and other parameters necessary for coin handling and vending machine use of the Anthony dollar coin were developed by the Office of Technology. The economic impact, toxicity, slugging and tactile discrimination of the new coin were also researched.

Frank Gasparro, the Mint's Chief Sculptor-Engraver, executed both the obverse and reverse designs for the Anthony coin, as shown in the accompanying pictures of the galvanos of the coin. The artwork in bas relief sculpture was prepared during the fiscal year. It had been approved by the Secretary of the Treasury and the Fine Arts Commission before September 30, 1978.

During the 1978 fiscal year U.S. Mint installations produced for general circulation cupronickel clad dollars, half dollars, quarters, and dimes, cupronickel 5-cent pieces, and 1-cent coins composed of 95 percent copper, 5 percent zinc. The Philadelphia Mint produced

5,260,137,000 coins with a face value of \$278,862,950; the Denver Mint manufactured 5,149,519,090 coins with a face value of \$182,020,827; the West Point Bullion Depository made 15,352,000 quarter dollar coins and 1,545,500,000 1-cent pieces, with a face value amounting to \$19,293,000; and the U.S. Assay Office, San Francisco produced 92,730,000 1-cent coins valued at \$927,300. These facilities of the Mint manufactured a total of 12,063,238,090 coins for general circulation with a face value of \$481,104,077 during the fiscal year.

The manufacture of 1-cent coins for general issue was resumed at the San Francisco Assay Office in July 1978. Circulating coin production at that site had been halted in May 1975. The 1-cent coins for general circulation produced during this period at San Francisco did not bear a mintmark.

A new reverse hub of the 1-cent design used in fiscal 1978 produced coinage dies and coins with a sharper detail.

During the fiscal year coinage strip was provided from both in-house fabrication and purchased sources. The Philadelphia Mint fabricated all 5-cent, 10-cent, and 25-cent strip and part of the required 1-cent strip in-house. Coinage strip for use at the Denver Mint and the San Francisco Assay Office was entirely purchased. Annealed/cleaned 1-cent blanks for West Point were furnished in major part from the Philadelphia Mint, with lesser quantities purchased. The costs of in-house strip continues to compare favorably with purchased strip costs.

By June 1978 copper prices had become sufficiently stabilized and the 1-cent inventory had become large enough for the Treasury Department to revoke the regulations which had been imposed in April 1974 prohibiting the exportation, melting, or treatment of 1-cent pieces. The revocation became effective June 7, 1978, following signature by Under Secretary Anderson.⁵

Stock and distribution of U.S. coinage.—The face value of the stock of U.S. fractional coins outstanding on September 30, 1978, was \$9,947,246,000, of which \$245,861,537 was held by the Treasury, \$260,787,687 was held by the Federal Reserve banks, and \$9,440,596,776 in circulation.⁶ On the same date \$652,277,000 worth of cupronickel clad dollars were outstanding. Of these \$38,514,186 was held by the Treasury, \$32,364,565 was held by Federal Reserve banks, and \$581,398,249 was in circulation.⁷

Standard silver dollars outstanding remained at \$481,781,898 throughout the fiscal year.

The Bureau of the Mint distributes coins for general circulation through the 12 Federal Reserve banks and their 25 branches and the U.S.

⁵ See exhibit 12.

^e See table 8.

⁷ See table 9.

Treasury, Washington, D.C. During fiscal year 1978 the Mint shipped 13,448,000,000 newly manufactured coins with a face value of \$606,558,000 to these facilities.8

Mint inventories of coins were 3,227,600,000 on September 30, 1978, compared with 4,611,700,000 at the end of September 1977.9 Inventories in the Federal Reserve banks amounted to 2,638,370,164 coins making a combined inventory of 5,865,970,164 at the end of fiscal year 1978.

During the fiscal year under certain limited conditions, the Mint shipped coins directly to commercial banks or facilities. Coin shipments to these facilities must be accepted by agents designated by the Federal Reserve Bank. Direct shipments were being made to four banks in the New York Federal Reserve District and to two banks in the San Francisco District by the fiscal yearend. At that time shipments were averaging six to eight per month to the New York District and shipments to the San Francisco District about five or six a month. This is benefiting the Government in a number of ways, including savings in transportation costs, labor costs at the Federal Reserve banks, and the conservation of energy (fuel).

Experimental shipments of 1-cent coins in bulk containers to four Federal Reserve banks during the year proved very successful. The prototype tests indicate that the potential savings in labor and material cost under this concept could be very significant.

The loads of 1-cent coins shipped in the Western District were increased from \$57,500 to \$64,000 duing the fiscal year. As a result, further savings in fuel consumption and transportation costs were realized.

A computerized and integrated forecasting and inventory control model was developed. The program was designed to project coin requirements and target inventories for each Federal Reserve bank.

1978 Annual Assay Commission.—The Act of April 12, 1792, which established the United States Mint, also provided for the Annual Assay Commission. It is believed that the Assay Commission has met almost every year since 1792. The law provides that the Assay Commission shall be composed of the Judge of the District Court for the Eastern District of Pennsylvania, the Comptroller of the Currency, the Assayer of the New York Assay Office, and such other persons as the President shall designate. In 1978, no public members were appointed to the Assay Commission. However, as required by law, the statuatory members met on the second Wednesday in February at the Philadelphia Mint for the purpose of verifying the quality of U.S. coins. Coins reserved from each mint's regular production of the previous calendar year were examined and tested. From the cupronickel clad coins one piece was selected at

^{*} See table 6.

⁹ See table 7.

random from every 100,000 pieces or fractional part thereof. The coins selected were sealed in envelopes and forwarded for the annual assay of coins.

The following table indicates the coins that were reserved during calendar year 1977 for the February 8, 1978, meeting of the Annual Assay Commission. The Commission reported at the conclusion of the proceedings that the trial of the coins was satisfactory in all respects.

Annual assay coins reserved at various mints during the calendar year 1977

Denomination	Philadelp	ohia Mint	Denve	r Mint		ancisco Office
	Pieces	Value	Pieces	Value	Pieces	Value
Cupronickel clad dollars	151	\$151.00	490	\$490.00	53	\$53.00
Cupronickel clad half dollars Cupronickel clad quarter dol-	884	442.00	673	336.50	53	26.50
lars	19,361	2,340.25	5,187	1,296.75	53	13.25
Cupronickel clad dimes	15,962	1,596.20	7,478	747.80	26	2.60
Total	26,358	4,529.45	13,828	2,871.05	185	95.35

¹ Includes 112 quarter dollars made at the U.S. Bullion Depository at West Point.

Reimbursable Programs

Special coin programs.—The United States Assay Office at San Francisco manufactured regular proof coin sets and continued to assemble 40-percent silver Bicentennial proof and uncirculated sets for delivery, as required. A total of 18,580,890 proof coins with a face value of \$5,914,917 were produced during the fiscal year, in addition 131,908 sets of three Bicentennial coins were delivered during the fiscal year. ¹⁰ All numismatic coins bore the "S" mintmark.

On April 3, 1978, the Mint began offering 1978 proof coin sets for sale to the public at \$9 per set.¹¹ These special sets contain one coin of each current denomination. By June 30, 1978, when the ordering period closed, 3.1 million sets had been purchased. Shipment of the sets began in May and was scheduled to continue through December 1978.

Approximately 2 million 1977 uncirculated coin sets were packaged at the San Francisco Assay Office from Phildelphia and Denver Mintproduced coins. These 12-coin sets, consisting of one coin of each denomination produced by each Mint, were shipped to customers who had ordered them between September 1 and October 31, 1977.

Congressionally authorized medals.—Public Law 95–229, enacted February 14, 1978,¹² authorized the Secretary of the Treasury to strike and furnish to the United States Capitol Historical Society a maximum of 104,000 medals by December 31, 1978. The medals were to commemorate an historic event or personality during 1777. By the fiscal yearend, 7,750 medals had been produced and delivered to the Society.

¹⁰ See table 1.

¹¹ See exhibit 9.

¹² See exhibit 6.

Other list medals.—Restrikes of the 3-inch oval pewter medal which had been designed for the 1977 Assay Commission¹³ were produced early in 1978. These medals were offered for public purchase for the first time at the American Numismatic Association Winter Convention in February 1978.¹⁴ Subsequently, they were made available for sale overthe-counter at Mint sales outlets at \$20 each.

Two additional medals of the Chief Justices of the Supreme Court series were completed in July 1978.¹⁵ The obverse of the Chief Justice Earl Warren medal was designed by Michael Iacocca, a Sculptor-Engraver at the Philadelphia Mint. The Chief Justice John Rutledge medal was designed by Philadelphia Mint Sculptor-Engraver, Edgar Steever. The obverse designs of the two medals, with the reverse design common to the entire series, are shown in the accompanying illustration.



The second set of medals in the Chief Justice series

¹³ See 1977 Annual Report of the Director of the Mint, page 7.

¹⁴ See exhibit 7.

¹⁵ See exhibit 17.

The first strikes of W. Michael Blumenthal's official Secretary of the Treasury medal were completed. Under Secretary Anderson presented these to the Secretary on September 19, 1978. The obverse of the medal, showing a full view portrait of the Secretary was designed by Frank Gasparro, the Mint's Chief Sculptor-Engraver. The reverse of the Medal featuring five seals in recognition of highlights of the Secretary's career, was designed by Philip E. Fowler, a Mint Sculptor-Engraver. Both sides of the medal are illustrated in the accompanying photograph.



Official medal of Secretary of the Treasury Blumenthal

National "List" medals in the traditional 3-inch size as well as the 15/16-inch and 11/2-inch sizes continued to be manufactured by the Mint throughout the fiscal year. Approximately 444 thousand list medals were produced at Mint installations during the fiscal year. 16

Effective October 1, 1977, the prices of most Mint list medals were revised to reflect the increased cost of materials and labor. The charge for postage and handling of mail orders was also increased. These were the first upward revisions in prices since October 1, 1970.

A descriptive list of the more than 300 historic medals which may be purchased from the U.S. Mint, with ordering information, is available from: The Bureau of the Mint, 55 Mint St., San Francisco, CA 94175.

Foreign coinage.—U.S. Mint installations were in the process of manufacturing coinage for the Dominican Republic and Panama at the fiscal yearend. By September 30, 5,287,000 coins had been produced for the Dominican Republic.

¹⁶ See tables 11, 12, 13, and 14.

Through December 31, 1977, U.S. Mints had produced a total of 11,127,314,256 coins for 42 foreign countries.¹⁷

Because of prior commitments and the production workload, the Mint declined to bid on foreign coinage orders for Algeria, Bangladesh, Israel, and the Philippines during fiscal year 1978.

Administration

Financial operations

During the 1978 fiscal year the Bureau of the Mint deposited \$414,432,568 into the general fund of the Treasury. Seigniorage on U.S. coins accounted for \$367,156,260 of the deposit. Of this amount \$296,884,894 was derived from the production of cupronickel clad coinage; \$70,235,149 from minor coinage; and \$36.2 thousand from silver clad Bicentennial coin sets sold during the year.

Monetary assets and liabilities

ASSETS	September 30, 1977	September 30, 1978
Gold bullion	\$11,238,345,679.81	\$11,247,794,711.11
Silver bullion	141,517,341.05	141,356,431.37
Cupronickel clad dollar coin	52,373,989.00	38,452,141.00
Subsidiary coin	297,928,636.15	204,535,575.30
Minor coin	57,864,965.62	37,537,011.44
Coinage metal other than silver	239,937,475.74	220,118,953.66
All other	2,062,089.32	1,112,382.68
Total assets	11,930,030.176.69	11,790,907,206.56
Bullion fund	11,689,902,195.80	11.568.529.952.73
Coinage metal fund	239.902.466.45	219,814,649.58
All other	225,514.44	2,562,604.25
Total liabilities	11,930,030,176.69	11,790,907,206.56

¹ Includes silver bullion for coinage valued at \$10,764,539.26.

NOTE. — For details by Mint institution see table 24.

Income, expenses, and application of funds, fiscal year 1978

	INCOME	
		In thousands
1.	Coins manufactured (face value)	\$487,250
2.	Appropriation	41,000
3.	Special Mint coin reimbursements	27,544
4.	Medal Sales	878
5.	Foreign coinage orders	
6.	Charges collected on deposits, etc	
7.	Sales of miscellaneous products	
8.	Sales of Government property, etc	207
9.	Miscellaneous reimbursements	
10.	Miscellaneous revenues	41
11.	American Revolution Bicentennial Medals	
	Total income	565,414

¹⁷ See tables 29 and 30.

Income, expenses, and application of funds, fiscal year 1978—Con.

	COST OF OPERATIONS	
1.	Accrued cost of operations (Includes Depreciation):	
	a. Coinage (domestic) \$32,002	
	b. Deposits 1,918	
	c. Protection	
	d. Refining	
	e. Executive Direction	
	Total operating cost	40,717
2.	Cost of metal used in domestic coinage	78,072
3.	Distribution of domestic coinage	2,479
4.	Cost of manufacturing special mint coins	27,545
5.	Cost of manufacturing medals	786
6.	Cost of manufacturing foreign coinage	99
7.	Cost of processing miscellaneous services	2,099
8.	Less depreciation (included in cost of operations)	-2,213
9.	Reconciliation of cost to obligations	-2,198
	Total cost of operations	147,386
	Excess of income over cost	418,028
	APPLICATION OF NET INCOME	
1.	Deposits to the General Fund of the Treasury	414,432
2.	Expired appropriation	257
3.	Inventory changes	2,239
4.	Net increase in Coinage Profit Fund	1,100
	Table founds and lind	410.020
	Total funds applied	418,028
	-	

During the fiscal year 1978, the Mint embarked on a program to develop an automated Financial Management Information System (FMIS). The first module to be developed, the General Ledger and appropriation accounting Reporting/System is in the design stage with implementation scheduled for the latter part of fiscal 1979.

On May 21, 1978, the Office of the Secretary of the Treasury assumed operation of the Treasury Payroll/Personnel Information System (TPPIS). The Bureau of the Mint transferred 54 positions and \$400,000 to the Office of the Secretary to continue ongoing operations of the system for the remainder of fiscal 1978.

Gold and silver

Refining.—The electrolytic refinery at the New York Assay Office produced approximately 3.3 million fine troy ounces of silver during the fiscal year.

The Mint's refinery also produced approximately 2.0 million fine troy ounces of gold during the period.¹⁸

Approximately 1,807 ounces of surplus silver were recovered by the U.S. Assay Office at New York during the fiscal year 1978.

Unrefined bullion stocks.—On September 30, 1978, a total of 14.2 million fine troy ounces of unrefined and 6.5 million fine troy ounces of semiprocessed gold bullion, as well as 7.0 million fine troy ounces of unrefined and 4.5 million fine troy ounces of semiprocessed silver bullion were held by the two assay offices and the Denver and Philadelphia mints.¹⁹

Gold.—On September 30, 1978, the Fort Knox Gold Bullion Depository, the assay offices, and the mints held a total of 266,393,521 fine troy ounces of gold bullion valued at \$11,247,720,531.20 The monetary value

¹⁸ See table 21.

¹⁹ See table 22.

²⁰ See tables 16 and 17.

of gold in the United States, \$42.22 per fine troy ounce, was the rate used for computing the value of the Mint's gold holdings.

Silver.—The silver balance held by the Bureau of the Mint totaled 39,208,331.41 fine troy ounces, valued at \$51,243,924, on September 30, 1978.21

Field Installations

The Philadelphia Mint

The Philadelphia Mint continued to improve the quality and quantity of the clad strip produced in-house. The plant produced approximately 73 percent of the strip required for the 5.26 billion coins manufactured during the fiscal year.

A high priority was assigned improvement of the plant work environment, which includes the reduction in the level of noise to which the workforce is exposed. The Philadelphia Mint succeeded in reducing the decibel level in its coin press area by enclosing noise-producing parts of the presses with soundproofing materials. A prototype riddle unit which will lessen noise levels was also constructed.

A study was begun during the fiscal year to evaluate the need and desirability of utilizing Frankford Arsenal, at Philadelphia, to supplement current coin production capacity.

Two contracts were awarded to identify air contamination and develop alternative means of controlling atmospheric conditions in the melting area of the Philadelphia Mint.

A special exhibit was designed and installed in the large display case on the mezzanine level of the Philadelphia Mint. The case contains medals and narratives arranged by subject including medals authorized to commemorate heroes of the War of 1812, the Mexican Conflict, and The American Civil War, as well as peace medals, humanitarian medals, medals recognizing technological advances, and others. During the fiscal year 295,587 visitors toured the public area of the Mint. This total included 744 groups, with an average of 49 persons per group.

The Bureau-designed 2-week Basic Supervisory Training Course was presented to 23 first and second line supervisors at Philadelphia Mint during the fiscal year. Career counseling was provided to 52 employees in the area of self-development, training, continuing education, and Government training practices.

The Denver Mint

In the interest of cost savings, plans for construction of a new Denver Mint have been abandoned in favor of the use of available surplus Government facilities in which to expand coin production capacity to meet future coinage requirements. A study was begun to evaluate the feasibility of using the Rocky Mountain Arsenal to supplement coin production capacity at the Denver Mint.

²¹ See tables 18 and 19.

Progress was made during the fiscal year to reduce the level of noise to which the Denver Mint workforce is exposed. Feeder systems on coin presses were being enclosed and riddle equipment was being isolated and enclosed at the fiscal yearend.

A forklift training program was initiated during the year in which more than 150 employees were trained and licensed for the safe operation of forklifts.

All first line supervisors participated in the 2-week training course conducted by the Bureau.

The Denver Mint began shipping coins under certain limited conditions directly to commercial banks or facilities. Coin shipments to these facilities must be accepted by agents designated by the Federal Reserve banks. As this program is expanded, substantial savings are expected to accrue to both the Bureau of the Mint and the Federal Reserve System.

During the fiscal year 260,840 visitors toured the public area of the Denver Mint.

The West Point Bullion Depository

Improvements in the unloading/loading, receiving area at West Point were completed during the fiscal year. The installation of hydraulic ramps, along with the expansion of the staging area and increased lighting have resulted in a more efficient, safer loading dock area.

Design work was completed and a contract awarded for the construction of a warehouse addition at the rear of the Depository for storage of miscellaneous items. The purpose of the addition is to release space within the vault area.

The West Point Bullion Depository continued to strike 1-cent coins, as well as quarter dollar coins during the fiscal year.

The function of safeguarding the majority of the silver owned by the United States was continued at the U.S. Bullion Depository.

The Old Mint (San Francisco)

On June 8, 1978, an exhibit of silver U.S. commemorative coins was opened at the Old Mint Museum. This collection, which is prized for the artistry and historical and cultural significance of the coins, is on indefinite loan to the Museum from a member of the Pacific Coast Numismatic Society.

The Museum Division presented a sales exhibit and Old Mint slide show to the Annual California State Numismatic Association Convention in Los Angeles.

During the fiscal year 100,192 persons toured the Old Mint Museum. These visitors spent \$196,323 in the Sales Area of the Museum.

The use of first-class presorted mail rates by the Old Mint for the mailing of order cards for proof and uncirculated coin sets resulted in savings of \$65,507 during the fiscal year.

In May 1978 the TPPIS function was transferred from the Mint to the Office of the Secretary of the Treasury.

The U.S. Assay Office at San Francisco

Immediately before the imposition of the postal rate increase in early 1978, the San Francisco Assay Office accelerated the production, packaging, and shipping of the 1978 proof sets. By utilizing available overtime hours, that facility shipped 815,000 sets in the 10-day period before the postal increase became effective. This unprecedented effort saved the Treasury \$850,000 in postage costs.

The San Francisco Assay Office continued to manufacture, package, and deliver the six-coin U.S. proof sets. In addition, in July 1978, this mint facility resumed the manufacture of 1-cent coins for general circulation. All of the proof coins bore the "S" mintmark, while the coins for general issue bore no mintmark.

Fort Knox Bullion Depository

The United States Bullion Depository at Fort Knox continued to safeguard most of the Treasury's gold.

In January 1978, the Crown of St. Stephen with its supporting cast of one Sceptre, one Orb, one Sword, and one Coronation Vestment were removed from the Fort Knox Depository, and returned to Hungary. Extraordinary security measures were employed by Mint personnel during the inspection, packing, and shipping of these Hungarian treasures, which were handled by Department of State employees.

The U.S. Assay Office at New York

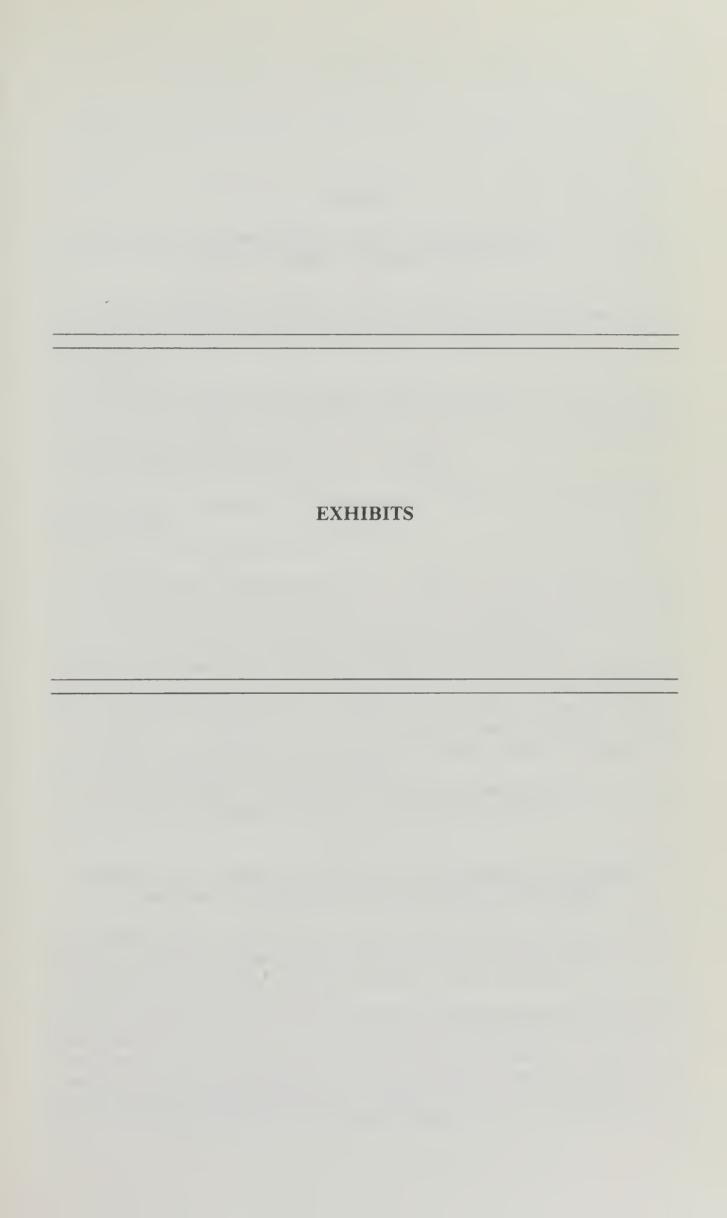
During the fiscal year 1978 approximately 105 assays and evaluations were conducted by the Assay and Quality Assurance Division for the Department of Defense. In conjunction with this service, Assay Office chemists made field trips to various Defense installations throughout the country to provide guidance and technical assistance in related matters, thus facilitating field work operations and lowering costs incurred for DOD's precious metal recovery programs. In addition, 37 assay reports of gold and silver deposits were made for other Government agencies.

Special assays, at cost, were conducted on 991 samples of gold and silver bullion and scrap as a service to the commercial community.

The New York Assay Office refined 3,257,560.10 fine troy ounces of silver and 2,040,848.525 fine troy ounces of gold during the fiscal year.

A Secret Service Security Survey of the New York Assay Office was conducted during fiscal year 1978. As a result, modifications were made in the physical security system, as well as the procedures relating thereto.





Exhibits

Exhibit 1.—Press release, October 3, 1977, concerning addition of President Carter's medal to National Medals List

The 3-inch bronze high-relief medallion and the 1-5/18-inch bronze miniature of President Jimmy Carter's Presidential medal have been added to the Mint's National Medals List and are now available for sale to the public, Acting Director of the Mint Frank H. MacDonald announced today.

The Mint's chief sculptor and engraver, Frank Gasparro, designed both the obverse and reverse of President Carter's medal-of-office. A likeness of President Carter appears on the obverse. Fifty stars encircle the reverse design bearing the Presidential seal and an excerpt from his Inaugural Address on January 20, 1977, reading: "The American dream endures. We must once again have faith in our country. Jimmy Carter."

The 3-inch bronze medal is for sale at \$6 over-the-counter at Mint sales outlets in Washington, D. C., Philadelphia, Pa., Denver, Colo., and San Francisco, Calif. And for \$6.30 by mail order.

The 1-5/16-inch bronze medal is priced at 50 cents over-the-counter and costs 60 cents by mail order.

The Mint has recently revised the brochure titled "Medals of the United States Mint" that lists the approximately 350 medals that comprise the National Medals List of bronze medals produced by the U. S. Mint. The medals date back to the American Revolutionary War and some, like the early Presidents' medals, are relics of the Nation's Indian Policy.

Among the series titles are: The Presidential medals; the Secretaries of the Treasury; the Directors of the Mint; a unique selection of Army and Navy medals; the National Historical series; official Mint Medals and Historic Buildings; and the Historic Customhouse Medals.

Price increases for the medals are reflected in the new brochure, available free-of-charge. The increases were necessary to meet the rising costs of salaries, supplies and postage and to keep the National Medals program self-supporting.

Please address all mail orders for President Carter's medals and requests for free medals brochure to: Bureau of the Mint, 55 Mint Street, San Francisco, CA 94175.

Exhibit 2.—Press release, October 26, 1977, concerning the President's nomination of Stella B. Hackel to be Director of the Mint

The President today announced that he will nominate Stella B. Hackel, of Rutland, Vermont, to be Director of the Mint. She would replace Mary T. Brooks, resigned.

Hackel was born December 27, 1926, in Burlington, Vermont. She received a J.D. from Boston University School of Law in 1948.

She was elected city grand juror (city prosecutor) of Rutland in 1956, and was reelected annually until 1963. From 1963-73 she was commissioner of the Vermont Department of Employment Security and chairman of the Employment Security Board.

Hackel practiced law in Rutland from 1973-75. From 1975-77 she was treasurer of the State of Vermont. She was the Democratic candidate for governor of Vermont in 1976. Since earlier this year she has been city attorney of Rutland.

Exhibit 3.—Transcript of proceedings, November 3, 1977, before the Senate Committee on Banking, Housing, and Urban Affairs concerning the nomination of Stella Hackel, of Vermont, to be Director of the United States Mint.

The committee met at 10:05 a.m. in room 5302, Dirksen Senate Office Building, the Honorable William Proxmire, (chairman of the committee) presiding.

The CHAIRMAN. We will come to order.

Our first nominee this morning is a distinguished lady from Vermont, Mrs. Stella Hackel. We are delighted to have her.

Why don't you come forward, Ms. Hackel. Invite your two distinguished escorts, the Senators from Vermont.

Ms. Hackel, now that you are seated and comfortable, I will ask you to rise and raise your right hand.

(Mrs. Hackel sworn.)

STATEMENTS OF THE HONORABLE PATRICK J. LEAHY AND THE HON-ORABLE ROBERT T. STAFFORD, UNITED STATES SENATORS FROM THE STATE OF VERMONT.

The CHAIRMAN. I will ask the distinguished senior Senator, Senator Stafford, to proceed. Senator Stafford. Thank you very much, Mr. Chairman.

It is a real pleasure for me to have this chance to appear here with a fellow townsman, Stella Hackel, who shares with me the fact of living in Rutland, Vermont.

I have known Mrs. Hackel for a number of years. I won't say exactly how many, but we each have had the experience of raising children in the City of Rutland, Vermont, and Mrs. Hackel is one who has shared with me at different times, being the Rutland city prosecutor, for whatever that may be worth.

The CHAIRMAN. Being the what?

Senator STAFFORD. Rutland city prosecutor. Our home town is a little city of about 20,000 people, with the usual minor crimes you might expect to find in a city of about 20,000.

More recently, Stella has been the Commissioner of Employment Security in the State of Vermont in the State government, where she served with distinction, and the Treasurer of the State of Vermont.

Ouside of her duties as a State official she has been a distinguished member of the Rutland County and Vermont Bar Associations, and a practicing lawyer in the State of Vermont.

So, having known her for a number of years and her family, I am very happy to have this chance to appear with her and with Senator Leahy and to give her my unqualified recommendation to be Director of the Mint. I am sure she will serve the country as she has the State of Vermont, with distinction, Mr. Chairman.

I appreciate this opportunity to appear here in her behalf.

The CHAIRMAN. Thank you, very much, Senator Stafford.

Senator LEAHY?

Senator Leahy. Mr. Chairman, I can only echo the comments made by Vermont's distinguished senior senator.

I have known Mrs. Hackel also for a number of years. I have been in various facets of Vermont State government prior to coming here. I know of her fine work as Director of Employment Security for the State of Vermont, the excellent work she did as State Treasurer for the State of Vermont.

We have been friends for a number of years. We have been political allies. We have campaigned together for each other in various positions. But earlier this year, when I recommended to the President and recommended to Secretary Blumenthal that Mrs. Hackel be given a position in the Treasury Department, I emphasized that I made the

recommendation based on what I felt were her qualifications, not in any sense of friendship or any sense of political alliance.

When I recommend Vermonters for positions with the Administration, I do it in a sense of loyalty to the Administration by recommending only people who are qualified.

It is for that reason that I asked the Administration to consider her for employment. I felt that it was very definitely for the good of the Administration.

I was delighted when earlier this year I received word from them that Mrs. Hackel was being considered for a position with the Treasury Department. I personally feel very, very comfortable giving my wholehearted endorsement and recommedation for her, for this position.

I certainly urge you, Mr. Chairman, and the members of your committee to recommend her confirmation to the Senate, as I would urge the full Senate endorse this confirmation.

I thank you for the opportunity of being here this morning.

The CHAIRMAN. Thank you very much, Senator Leahy.

Mrs. Hackel, the Bureau of the Mint has, as I understand it, about 2,500 employees. It, as we know, manufactures coins, receives deposits of gold and silver bullion, safeguards the Government's holdings of monetary metals and refines gold and silver bullion. It also manufactures coinage for certain foreign governments.

The Mint does make and sell to the public medals of historic interest such as Presidential medals.

In addition to its own medal program, from time to time by an act of Congress the facilities of the Mint will be used to manufacture medals. These medals are sold at cost to the sponsoring groups and used as fund-raising devices for private groups.

You have a fine record as a lawyer. You certainly come with the warmest kind of recommendations by your two distinguished senators.

I notice that you graduated with honors from Boston University Law School. That's an excellent law school. I wonder about your administrative experience—2,500 people is a lot of people. We are concerned about efficient organization and operations in our Federal Government.

What is your feeling about administrative experience and how you could handle this kind of challenge?

Ms. HACKEL. My background in government administration is fairly extensive. While it was in a small State, the State of Vermont, many of the programs that are nationwide, we have some part of them in the State of Vermont.

I spent 10 years as the commissioner of employment security, which is one of the largest departments of State Government. Of course, as you know, unemployment insurance and jobs and employment services is covered in that.

I ended up, as a matter of fact, the president of the Interstate Conference of Employment Security agencies, which is the organization made up of the 50 State administrators.

During my term of office, I firmly believe and hope that we had one of the best departments in State Government. So from that point of view, I have had some administrative experience.

We did have a multi-million dollar budget, close to 400 employees at the end of my term in 1973. Thereafter, I did go back to practice law in Rutland, but ran for State Treasurer and held the position of State Treasurer for 2 years.

I think, therefore, I have had some considerable experience in Government administration, while I understand, of course, that the Federal Government and the Bureau of the Mint is larger.

The CHAIRMAN. I understand for the past few weeks you have been a consultant to the Treasury and also met with two of your predecessors, Mary Brooks and Eva Adams.

Do you plan any changes in the policies or operating procedures?

Ms. HACKEL. Mr. Chairman, I would say it is early on yet to plan changes in policies or operating procedures and, surely, on important policy decisions I would want the Treasury Department input and conferences. And that Mr. Blumenthal and Mrs. Anderson were in agreement with whatever important policy changes we might make.

We have, however, discussed with Mrs. Anderson some matters—in respect to retaining the penny or other issues that may be of importance, and will be formulating, I expect, some changes.

The CHAIRMAN. Have you had chance to familiarize yourself with the Treasury's review of our present coinage system? That study, as I understand it, suggested the possibility of taking the penny out of circulation because it is becoming too costly to manufacture and distribute, something that every American would be interested and concerned about.

I understand the Mint was conducting a consumer survey to test the public reaction to removing the penny.

Will the results of that survey be made available to the committee, and do you have any comments on the future of the penny as a circulating coin?

Ms. HACKEL. In respect to the 1-cent coin, and the retention or elimination of the coin, I have had some conferences with the Treasury Department officials on that matter.

The original reasons, as I understand them, for the proposal of the former Secretary of the Treasury that Congress consider eliminating the 1-cent coin were valid at the time, I expect, because the price of copper was rising and the production costs and diminishing utility of the coin were factors to be considered.

However, at this time, it is my understanding that a more recent review of the coin demand has resulted in modified production of projections as to what the attrition rate is going to be, what the demand is going to be. So now it appears we would have production capability through the mid-1980's to produce the penny if we decide to retain it.

And further, there is now being considered the possibility of an alternative to building the new Denver mint, which was in the nature of a \$60 to \$65 million facility. It may be that if we do need production facilities later on to produce the 1-cent coin, that we might be able to use a surplus Federal facility, and modify and equip it at a cost much closer, perhaps, to \$10 million.

In any event, the cost of production and manufacture, because the cost of copper appears now to be fairly stable, seems to indicate that there is no urgent need at this point to make the decision to eliminate the penny.

The decision obviously will be made at a higher level than mine, but, at this time, it would appear that there is no immediate need to take that action.

The CHAIRMAN. In a way it will be a sad day if we have to abandon the penny. It will certainly be a surrender to inflation and a recognition of the fact that we permitted our currency to depreciate as much as we have.

How about the Denver mint? Do you have any views on whether or not that should be completed?

We had hearings on that a year or two ago; very controversial issue.

Ms. HACKEL. It is a matter of whether or not the Denver Mint is necessary, obviously. There is not much point in constructing a new, very expensive facility if it is not essential. It is true that the old Denver mint is congested; the noise level is unacceptable.

It is an old plant, and some modifications there are required in terms of the safety of our workers and good manufacturing conditions for our people.

But in terms of a need to construct the new Denver Mint, I think that needs to be reconsidered with the possibility in mind of saving many millions of dollars by using a surplus Federal facility.

The CHAIRMAN. I just have a couple more questions.

I was surprised to learn that the mint uses four different methods to forecast the Nation's coinage requirements and quite different results can be achieved with each method.

That information was provided to the committee by the General Accounting Office last year when we considered legislation to build the new Denver Mint.

Has there been any attempt to develop a more reliable coinage forecasting program by the Federal Reserve System? Given the very models presently being used, how can the Mint accurately predict future coinage requirements?

Ms. HACKEL. It is very difficult, I am sure.

It is my understanding that back around 1972, the Mint and the Federal Reserve System were instructed by Congress to jointly try to forecast so the forecasting would be more accurate.

However, some few years later, it is my understanding, the Federal Reserve System's forecasting of the need for coins was in error, resulting in an overproduction which was apparently hard to store because of the limited storage facilities of both the Federal Reserve banks and the Mint.

Thereafter, I think since 1975, by an agreement of both parties, the Mint has taken on the responsibility of forecasting.

I am not, as of this time, familiar with the details of the forecasting system. I know that they have had different time limits, ranging from 3 years to 3 months in terms of what their needs may be. Long-range forecasting is on a 3-year basis.

The budget forecasting is on a 2-year basis, but in terms of the actual methods of forecasting, that I would have to learn more about. Certainly, I think the best—

The CHAIRMAN. Well, in this day and age with all of our advanced technology and greater degree of sophistication, things of this kind, you would think that while the Federal Reserve has made many blunders in many areas and is going to make more in the future, you would think this is one area where they would be able to work out a reasonably accurate system.

We will have Arthur Burns before us in a few days. We will go after him on it.

Another question.

The Mint also manufactures coins for certain governments which do not operate their own mints, such as Panama and Haiti.

How does the Mint obtain those contracts? Is there open solicitation? Is the U.S. Mint in competition with private mints in this country for this business?

Ms. HACKEL. I would say generally the U.S. Mint is not in competition with private mints. Traditionally, what the U.S. Mint has done is produce coins for circulation, commercial coins for friendly foreign governments which do not have sufficient coinage facilities or any coinage facilities at all.

However, in the near past, about 5 years ago, apparently the decision was made at the Mint to produce silver proof sets for Haiti, and that contract was completed 2 years ago.

As a matter of fact, those proof sets are now being advertised. In my judgment, that could fairly be said to be competitive with private industry.

In line with the Administration policy—and it is a very proper policy—that Government should not compete with private industry, that will be the direction in which I would tend to move.

In terms of circulating coins, commercial coins, I doubt that we are in competition with private industry because the private mints would have to compete as we compete, with the Canadian Mint, for example.

The volume required, billions of coins required, would be something that they would not be able to handle. Surely, as to silver proof sets—and that was an isolated instance, as I understand it from my people at the Mint—the mint should not compete with private industry.

The CHAIRMAN. Senator Garn?

Senator GARN. I have no questions, Mr. Chairman.

I think the President has submitted an excellent nomination and would hope the committee would approve it promptly.

Ms. HACKEL. Thank you.

Senator STAFFORD. Mr. Chairman?

The CHAIRMAN. Senator Stafford?

Senator STAFFORD. I would like to add if Mrs. Hackel runs into an excess of coinage that needs to be stored, I would like her to know I have an extra garage. (Laughter.)

The CHAIRMAN. I had the same idea.

Senator LEAHY. Mr. Chairman, I would make a similar offer, except having been visited last year, to my dismay, by the silver burglars in this area. I don't think I will make the offer. (Laughter.)

The Chairman. Thank you very much, Mrs. Hackel, Senator Stafford, Senator Leahy. We appreciate your testimony very much. It's been helpful and responsive.

Exhibit 4.—Press release, January 10, 1978, concerning early completion of shipment of 1977 proof coin sets

Shipment of all 1977 Proof Coin Set orders was completed on December 21, 10 days sooner than the promised date on the ordering materials, Mrs. Stella B. Hackel, Director of the Mint, announced today.

"We were pleased to have been able to complete the shipments of 3.2 million sets ordered several days ahead of schedule," Mrs. Hackel said. This accomplishment was due to the fine efforts of Mint employees in both the Old San Francisco Mint and the San Francisco Assay Office. It is the Mint's objective to serve well the numismatic community throughout the country.

Orders for 1.7 million 1977 uncirculated coin sets were also in the mail by the end of the year and the remaining orders for over 300,000 sets will be shipped this month.

"The number of orders the Mint received this autumn for the 12-coin uncirculated sets exceeded expectations and production plans," Mrs. Hackel reported. "Rather than return those orders which exceeded the Mint's capacity to produce, package, and mail by the end of the year, we offered a refund to those customers who did not wish to wait for the later delivery date. Of the 111,000 customers involved, less than 1,000 chose to cancel their orders."

Mrs. Hackel requested that individuals inquiring about an order should note their Order Number and Customer (account) Number in their correspondence. Inquiries should be addressed to: Bureau of the Mint, 55 Mint Street, San Francisco, CA. 94175.

Exhibit 5.—Press release, January 24, 1978, concerning results of Mint survey of numismatic customers

Director of the Mint Stella B. Hackel today announced the results of a nationwide survey of the Mint's numismatic customers. Among other disclosures, the survey revealed customer satisfaction with the quality of the special coins and medals produced by the Mint, with 75 percent rating them Excellent or Above Average.

The survey, conducted last September, was sent to a random selection of customers on the 2.5 million name mailing list maintained by the Bureau of the Mint. Approximately 45.5 percent of those surveyed responded.

"The survey was taken to help the Mint know their customers better and to provide the products and services they desire," Mrs. Hackel said. "We were pleased to learn that a majority of the Mint customers surveyed are satisfied with the quality of Mint products."

The survey included questions on customer satisfaction with Mint products and services, preferences on new medal products, why collectors buy coins or medals and the demographic make up of Mint customers.

"To save for children and grandchildren" was the main reason selected by coin set purchasers (41 percent) as to why they purchased the coin sets—with "Investment" the second most popular reason (28.2 percent). Medal customers selected "Historic Value" as their main reason for buying (41 percent) with "To save for children and grandchildren" the second most popular reason (29.5 percent).

The survey also revealed that 98 percent of those questioned found the ordering instructions easy to understand.

Questions directed to medal purchasers revealed:

- · Of five medal alloys listed (silver, pewter, bronze, gold-plated silver, and gold-plated bronze), first preference was silver and second most favorite was bronze.
- · Almost one-third of those surveyed had no preference as to the size of medal offered. Approximately one-fourth selected the 1 ½-inch diameter as preferable and the least selected size was 1 inch diameter.
- A majority of medal customers prefer the medals to be offered individually rather than in a series; and if in a series, that the medals within the series be offered individually.

The survey also indicated that a majority of the Mint customers are between the ages of 36 and 65, have family income of \$10,000 and over, have had some college education, and have children living at home.

Exhibit 6.—An act to provide for the striking of a national medal to commemorate the bicentennial of an outstanding historic event or personality during 1777

[Public Law 95-229, H.J. Res. 386, Feb. 14, 1978]

Resolved by the Senate and House of Representatives of the United States of Historic event America in Congress assembled, That, in commemoration of the Bicentenni- or personality al of the founding of the United States of America and the adoption of the during 1777. Constitution of the United States of America and of those individuals who Bicentennial participated in the American Revolution, the Secretary of the Treasury commemorative shall strike and furnish to the United States Capitol Historical Society medals. (hereinafter referred to as the "Society") no more than 104,000 medals with suitable designs, emblems and inscriptions to be determined by the Society, with the concurrence of the Commission of Fine Arts, subject to the approval of the Secretary of the Treasury. The medals shall be made and issued at such times and in such quantities as may be required by the Society and subject to the approval of the Secretary of the Treasury but no medals shall be made after December 31, 1978. The medals shall be considered to be national medals within the meaning of section 3551 of the Revised Statutes (31 U.S.C. 368).

SEC. 2. The medals shall be furnished by the Secretary of the Treasury Cost. to the Society at a price equal to the cost of manufacture, including labor, materials, dies, use of machinery, and overhead expenses, plus a surcharge equal to 25 per centum of such cost of manufacture. Such surcharge shall be deposited in the Treasury as miscellaneous receipts. Security satisfactory to the Director of the Mint shall be furnished by the Society to indemnify the United States for full payment of the costs of manufacture.

SEC. 3. The medals authorized to be issued pursuant to this Act shall be struck in bronze, silver and gold and shall be of such size or sizes as is determined by the Secretary of the Treasury in consultation with the Society.

Approved February 14, 1978.

Exhibit 7.—Press release, February 16, 1978, concerning sale of 1977 Assay Commission Medal to the public

Director of the Mint Stella B. Hackel today announced the 1977 Assay Commission medal will be offered for public sale—the first time ever for a Mint Assay Commission Medal. The medal will be offered at \$20 each at the American Numismatic Association winter convention in Colorado Springs, Colorado, February 15–19, 1978.

The oval medal is hand finished and made of pewter. It measures 60 by 76 mm. When the quantity of production is sufficient, it will be available for sale over-the-counter at Mint outlets at the Treasury Department in Washington, D. C., the Philadelphia and Denver Mints and the Old San Francisco Mint.

The Assay Commission medal in limited quantity has been struck each year and distributed to the public and ex-officio Commission members, and Treasury and Mint officials participating in the activity. There were no public members appointed to the 1977 Assay Commission.

"The medals are pewter and hand finished, so that the price must necessarily be more than that usually charged for Mint medals, to cover Mint costs as required by law," Mrs. Hackel stated. Mrs. Hackel emphasized that the medals will be identical to those produced last year.

The obverse design of the medal, executed by Mint Engraver Philip Fowler, bears a profile of Martha Washington and was adapted from Edward Grove's 1965 experimental coinage design. The Mint's chief Sculptor and Engraver, Frank Gasparro, assisted by Engraver Matthew Peloso, designed the reverse showing the first United States Mint at Philadelphia.

Exhibit 8.—Statement by Director of the Mint, February 18, 1978, before the American Numismatic Association Winter Convention, Colorado Springs, Colorado

Ladies and gentlemen of the head table, distinguished guests, members of the American Numismatic Association, and other friends:

I am very pleased and honored to be the banuet speaker at the first annual winter convention of the ANA, and to be here to congratulate you upon the opening of the ANA Museum Galleries. It is a most impressive event; and an accomplishment you must be very proud of indeed. I am delighted, both in behalf of the Mint and personally, o be here to participate with you in noting this high achievement.

As indicated to you in the introductory remarks, I had the honor to be confirmed by the U. S. Senate on November 4, 1977, as the 32d Director of the Mint for a term of 5 years, at the pleasure of the President. The Director of the Mint has the responsibility for managing one of the world's largest coin and medal producing facilities; and the next several years have been termed as among the most critical in the Nation's coinage history.

My professional background during the past 25 years has been that of a lawyer, a State Government administrator in the field of jobs and unemployment insurance, and State Treasurer of Vermont.

During that entire period of time, I admit: I was not a coin collector; or any other type of collector of rare and precious objects. I realize now that perhaps I missed something; and I am now beginning to take a positive interest in numismatic matters.

Please understand that I am first and basically interested in the overall general administration of the U. S. Mint. Its primary mission is the production of coins for use in the Nation's commerce. Extremely important, too, the Mint is the depository of the Government's holdings of gold and silver bullion and coin monetary assets.

The Mint organization comprises coinage mints located at Philadelphia and Denver, with auxiliary production of pennies at West Point; assay offices at San Francisco and New York—San Francisco packages and ships the Mint proof and uncirculated coin sets and New York Assay Office is a refinery; bullion depositories at Fort Knox, Denver, New York Assay Office, San Francisco Assay Office, and West Point; the Old Mint at San Francisco, housing the Mint Museum and our computer complex; and the Washington headquarters office.

It goes without saying that the overall general administration of the U. S. Mint includes its important numismatic responsibilities. I recognize fully that there are millions of people in this country who have a deep artistic, and also economic, interest in beautiful coins and medals. There is no question but that it is a serious responsibility of the U. S. Mint to serve them well; they are entitled to it.

The Mint is very pleased to be a part of this historic ANA convention. It chose to make the theme of its exhibit the nearby Denver Mint, one of the most historic of all Federal facilities. We decided to add our bit of history, too, by making available for public purchase for the first time at our exhibit here, an Assay Commission medal. The medal is hand finished in pewter and was designed for the 1977 Assay Commission, of which for the first time there were no public members.

It was in 1792 that the U. S. Mint was established. In the same Act of Congress, an Assay Commission was authorized. As many of you know, it has been the practice of the Mint since 1860 to strike medals in honor of the Annual Assay Commission. The medals have been struck in a small limited number each year and have never been offered for sale to the public by the Mint prior to this year, this month, here at your first winter convention.

Last week in Philadelphia the ex-officio members of the 1978 Assay Commission met on the statutory day, the second Wednesday in February. There were no public members appointed—and no medal struck.

The future of the Annual Assay Commission itself has not yet been determined at this time. The Assay Commission is the subject of a study by the President's Reorganization Project Staff. Should a decision be made to abolish the commission, the 1977 medal would be the last of them.

Now, I would like to direct my remarks to commemorative coinage. While we can well appreciate the interest of the numismatic community in commemorative coinage, the Department has long objected to the issuance of such coins. The Department's opposition stems mainly from the abuses resulting from the large number of commemorative coins authorized by Congress during the earlier part of this century in behalf of private sponsoring organizations.

The Department's concern with such commemorative coins has been shared not only by several of our Presidents, who vetoed commemorative proposals, but also by the Congress. Noting that "no country in the world permits such abuse of its coinage as has been permitted in this country," the Congress in 1939 imposed a general prohibition on the issuance of commemorative coins.

However, the Department has not objected to special coinage authorized by the Congress for the Government's own account rather than for the benefit of private sponsoring organizations. Thus, the Department raised no objection to the provision in the Bicentennial Coinage Act of 1973 which directed the minting of 45 million silver clad coins commemorating the Bicentennial of the American Revolution. The issue, were it to arise once again in proposed legislation, of a new commemorative coin for the Government's own account would receive careful and serious consideration by Treasury.

In respect to gold coinage, the Treasury Department would not be in favor of any proposal authorizing gold coins in the U. S. coinage system. That position is based primarily on international monetary considerations. It has long been the policy of the United States to diminish the role of gold in the international monetary system.

In respect to silver coinage, the Mint has sold to the public approximately 50 percent of the 45 million authorized 40 percent silver bicentennial coins. Also, the Mint now stores 900,000 of the three million 90 percent silver Carson City dollars remaining undistributed in 1970. Those coins were minted in the last century at the Carson City Mint.

In 1970 Congress transferred custody of the Carson City dollars from the Treasury Department to the General Services Administration for sale to the public. Between 1971 and 1974, GSA sold more than two million through mail bids. Now GSA is seeking legislation from Congress to authorize a market program to dispose of the remainder. The House Banking Subcommittee on Historic Preservation and Coinage currently has the matter under consideration. It is expected that hearings may be scheduled in early spring.

In reference to national medals, Congress just passed with amendments H.J. Resolution 386, sponsored by the U. S. Capitol Historical Society. It provides for the striking by Treasury of a national medal to commemorate the bicentennial of an outstanding historic event or personality during 1777. The bill now awaits Presidential signature.

The final version of H.J. Resolution 386 excludes a provision authorizing the Bureau of the Mint to use the Mint numismatic mailing list. At the Senate Banking Committee hearing, I expressed the position of the Department that the list must not be used on the grounds that it would be an invasion of privacy of the 2.5 million people listed; that it would be an unprecedented use in behalf of a privately-financed non-governmental agency; and if we did so, other nonprofit private organizations of equal worthiness would demand the same privilege. The ANA has also requested use of the list, and the answer must be the same. In accordance with Privacy Act notices published by the Treasury Department last September, the Mint's mailing list may be used only to announce Government numismatic items and to process orders from the public for those items.

Other amendments to H.J. Resolution 386 changed the national medal authorization from a 13-year series, to a single 1978 medal, to test its success in the market; and added, for the first time in a national medal law, a surcharge of 25 percent of cost of manufacture.

In respect to the Mint numismatic offerings this year, we project sales in 1978 of 3.5 million proof sets and 2.1 million uncirculated coin sets. We have carefully analyzed cost factors this year to determine if a reduction in price was possible while yet reimbursing Mint costs as required by law. We cannot reduce the price, but will hold firm and not increase it this year.

It will be a Mint objective now to make Mint coin sets and national medals more available to Americans generally, including those not necessarily numismatic collectors. We are considering potential distribution systems which would enlarge the present system. We now have a single public mail offering for proof and uncirculated coin sets. For national medals, souvenir sets, and bicentennial coin sets, the Mint has retail outlets in Philadelphia, Denver, San Francisco, and Washington. There are undoubtedly millions of Americans not on our list who cannot travel to those outlets, but who would be interested in coin and medal collecting if readily available. We would like to reach them.

In that connection, the Mint has determined that in 1978 coins minted in 1978 will be made available on a timely basis to the American public. We have modified the past Mint policy of first in—first out, meaning that all earlier dated year coins for commerce must be shipped to the Federal Reserve System prior to current year coins. Instead, this year we will ship from Denver all denominations of 1978 dated coins on a priority basis; and from Philadelphia all 1978 dated coins except 50¢ and \$1 coins, which will be shipped on a priority basis starting May 1, whether or not the backlog inventory of earlier years has been exhausted.

Further, in regard to new coins, the Department is considering a legislative proposal for a new, smaller \$1 coin. We would plan to have a sufficient inventory prior to placing the coin in circulation, to avoid a speculative numismatic-type market.

The Department no longer pursues elimination of the 1-cent coin from our coinage system. Instead, to enlarge production capacity we are exploring the possibility of acquiring surplus federal facilities to strike 1-cent coins. Also, we may utilize the San Francisco Assay Office once again as a production facility for the 1-cent coin. We recognize, of course, that production at San Francisco must be of sufficient quantity to avoid the speculation that occurred when "S"-mint cents were last struck for circulation in 1974.

In closing, I want to take this opportunity to express the deep appreciation of the Mint for the many courtesies extended to my people and me here at this convention. I have been very much impressed by the high calibre and distinction of the officers and members of the ANA. It has been interesting experience and a great pleasure to be here. I hope you invite me back, and often.

Exhibit 9.—Press release, March 29, 1978, concerning acceptance of orders for 1978 proof coin sets

Mint Director Stella B. Hackel today announced that orders for the 1978 proof coin sets will be accepted beginning April 3, 1978, at the San Francisco Old Mint.

The 1978 proof sets will be sold for \$9 each with a limit of five sets per customer. "We are pleased that the selling price can remain the same as last year's sets," Mrs. Hackel said.

The 1978 sets contain the six coins presently made by the Mint—a cupronickel dollar, half dollar, and quarter, and the dime, nickel, and cent. The coins are sealed in an airtight display case.

Proof coins bear the "S" mint mark and are produced only at the San Francisco Assay Office, Mrs. Hackel explained, and they require special handling. Each coin is struck twice as opposed to the single strike given our regular circulating coins. In addition, specially polished blanks and dies are used which produce jewel-like coins.

Since limited production and mailing capability make it necessary to limit the ordering period for these sets, Mrs. Hackel urged individuals interested in obtaining 1978 proof sets to order as soon as possible. Orders will be accepted for approximately 2 months, and the sets will be mailed out by the end of December. The Mint must reserve the right to cancel any orders which exceed production capacity.

The Director noted that those individuals already on the Mint mailing list would receive information in the mail shortly. Individuals not on the mailing list can order sets by writing to the Bureau of the Mint in San Francisco, indicating how many sets they wish to order (limit of five sets per individual), their name and address and enclosing a check or money order payable to the Bureau of the Mint. Orders should be mailed to: Bureau of the Mint, 55 Mint Street, San Francisco, CA 94175.

Exhibit 10.—Press release, May 1, 1978, concerning first shipments of 1978 proof coin sets

The first group of 1978 proof coin sets were mailed from the San Francisco Assay Office today, announced Mrs. Stella B. Hackel, Director of the Mint.

The Director said that orders would be mailed each working day in the next several months. Those customers not in the first group to be mailed their sets will receive an acknowledgement card indicating their order number and the date by which their order will be delivered.

During the first 2 weeks of the ordering period, which opened April 3, 1978, the Mint received approximately 700,000 orders for over 2,000,000 sets. Staff members at the San Francisco Old Mint, where the orders are processed, indicate that a large quantity of orders

continues to arrive each day. The Mint anticipates that they will continue to accept orders through the end of May.

The 1978 proof coin sets contain a "proof" of each of the six coins presently being minted for circulation. These proof coins are produced by the San Francisco Assay Office and are the only coins with the "S" mint mark. Each proof coin is individually struck twice, using polished dies and blanks to produce a coin of jewel-like quality. The coins are sealed in a hard plastic case which protects and displays them.

The sets are priced at \$9 per set and individuals can order up to five sets. Individuals desiring to obtain these sets should write to the San Francisco Old Mint, 55 Mint Street, San Francisco, CA. 94175. A check or money order for the amount of purchase made payable to the Bureau of the Mint must accompany each order. The Mint reserves the right to cancel or reduce orders, pending their ability to meet the demand.

Exhibit 11.—Statement by the Director of the Mint, May 17, 1978, before the Subcommittee on Historic Preservation and Coinage of the House Committee on Banking, Finance and Urban Affairs

As Under Secretary Anderson has indicated, Mr. Chairman, my testimony will deal with the technical aspects of the \$1 coin proposal. I appreciate this opportunity to appear before you, Mr. Chairman, in support of this proposal. If the proposed bill meets the approval of the Congress, it would result in a significant improvement in our coinage system.

The limited usefulness of the current \$1 coin has been of concern to the Bureau for several years. It has been clear to us for some time that, primarily due to its cumbersome size and weight, the \$1 coin cannot effectively serve as a medium of exchange. Our views have been reaffirmed by an independent study conducted by the Research Triangle Institute, concluded in 1976. It was the finding of the study that a smaller \$1 coin, sized between the current quarter and half-dollar, would be far more acceptable to the general public than the existing coin.

Physical Characteristics

In determining the appropriate physical size of a new coin, the Mint has considered several factors, including handling convenience and the potential for counterfeiting or slugging. The recommended weight of 8.1 grams is the lowest possible weight for convenient handling by the general public, while at the same time, being sufficiently heavy to be readily distinguishable from the quarter. The quarter weighs 5.67 grams, thus, the proposed coin would be 43 percent heavier than the quarter.

I should point out, Mr. Chairman, that the weight for the new \$1 proposed in our legislation is specified as 8.5 grams. However, after submission of the proposal, we were advised by the coin sorting manufacturers that a \$1 coin with a slightly lower weight would facilitate high speed coin sorting. Since coin sorting machines are used by all major retailers and banks, we feel this is a legitimate consideration; thus, we now recommend that the weight be changed in the proposed bill from 8.5 grams to 8.1 grams.

The new \$1 would be distinguishable from the quarter by touch as well as by sight. The design proposed would have an 11-sided inner border on both sides of the coin within the outer circular configuration. This design element would provide a means for tactile recognition by the visually handicapped.

For purposes of high utilization in automatic merchandising devices, it is essential that the size of the coin preclude the use of readily available low value foreign coins of identical size to slug the equipment. A diameter of 1.043 inches in size (26.5 millimeters) best meets this requirement and has been endorsed by the major manufacturers of automatic coin handling equipment.

Further, to prevent the slugging of the new coin by reducing the diameter of the current half-dollar, the thickness of the cupronickel outer layers would be increased. The clad layers would constitute 50 percent of the total thickness of the coin as compared to one-third in our current cupronickel clad on copper coins.

Composition

Except for the two minor coin denominations, the cent and the nickel, all circulating U.S. coins are made of a cupronickel alloy bonded on both sides to a pure copper core. This composition has many advantages, including superior surface wear and appearance, and relative low cost to produce. Overall, it is approximately 90 percent copper, and economically, fabricated into coinage strip for high relief coins. Also, the unique electrical properties and density of this cupronickel ("sandwich") laminate make it very difficult to counterfeit or slug.

Many materials—including several copper alloys, titanium, and other clad combinations—were tested to determine the most suitable composition for the new coin. The results of the studies indicate that the best overall material is a 75 percent copper/25 percent nickel alloy clad on a 100 percent copper core.

Except for the thickness of the cupronickel cladding for the new smaller \$1 coin, this laminate is the same material now being used in all of our coin denominations other than the 5-cent and 1-cent coins. Manufacturing cost is estimated at 3 cents per coin compared to 8 cents for the current 1.5 inch diameter dollar coin.

Design

Throughout our history various Liberty designs have been predominant on our circulation coins until the last few decades when, on historically significant occasions, U.S. Presidents were selected for such honor. Benjamin Franklin, who holds a unique position in our history, appeared on the half-dollar for a period of 15 years, and is the lone exception to the abstract or Presidential designs.

The recommended design for the obverse is a modern or stylized female Liberty Head. This historic design appeared on the first U.S. coins minted in 1793, and appeared in various forms on almost all denominations of our coins through modern times. The female Liberty Head is symbolic of and honors all women rather than any particular individual. It is accompanied by the Phrygian Cap which has been a symbol of freedom for over 2,500 years and has repeatedly appeared on our coins. It is most appropriate that such a historic American design once again return to an American coin.

The recommended design for the reverse is a soaring or volant eagle. The eagle has appeared on the reverse of every \$1 coin since 1794 with the exception of the gold coins. The recommended design, though similar to the 1916 quarter-dollar eagle, is a more vivid rendition emphasizing the independence and spirit which characterizes this national symbol.

Many distinguished American men and women have made substantial contributions to our country which are worthy of recognition. A select few have been honored on limited issue commemorative coins. The new \$1 coin is intended to circulate widely; thus, a design consistent with the historical precedents established by the Secretary of the Treasury and the Congress would be most appropriate. In our view, expanding the field of design selection beyond historical abstracts and U.S. Presidents would set an unwise course in coin design, and invite a controversial debate which would tend to damage the overall success of the proposal.

Eisenhower Dollar

As the Under Secretary noted in her testimony, the proposed bill would authorize the Department to continue the minting of the 40 percent Eisenhower silver dollar in its present

size. If approved by the Congress, the bill would thus authorize the first commemorative U.S. coin to differ not only in design and alloy but also in size from the circulating coin of identical denomination.

Production Plan

At such time as the legislation is approved by the Congress, the Mint would immediately start the contracting process for the necessary coinage strip. This would take approximately 3 months; at that point, we could start the actual production of the coins. Were the recommended design adopted, approximately 2 months would be required for the Mint to complete the fabrication of dies and the procurement of the production tooling necessary for the new coin, during which time the coinage strip would also be procured.

Our plan is to undertake production at an accelerated rate, producing 500 million pieces of the new coin in 6 months, prior to their release to the public. Such a large inventory of coins prior to initial distribution would assure an equitable and adequate supply of coins throughout the Nation.

This statement concludes my prepared remarks, Mr. Chairman. I would be pleased to answer any questions you may have.

Exhibit 12.—Revocation of regulations prohibiting the exportation, melting, or treating of one-cent coins, May 31, 1978

Title 31—Money and Finance: Treasury

CHAPTER I—MONETARY OFFICES, DEPARTMENT OF THE TREASURY PART 94—COIN REGULATIONS

Revocation of Part

AGENCY: Department of the Treasury.

ACTION: Final rule.

SUMMARY: To protect the coinage of the United States, the Secretary of the Treasury issued regulations effective April 18, 1974, prohibiting under criminal and civil penalties the exportation, melting or treating of one-cent coins. Because of changed economic conditions and other factors, including the large inventory of cents maintained by the Government, the prohibitions are no longer necessary. Accordingly, the prohibitions on the melting, treating or exporting from the United States of one-cent coins are revoked. This revocation will not be retroactive and, therefore, will not operate to authorize any melting, treating or exporting of one-cent coins which took place in violation of part 94.

EFFECTIVE DATE: June 7, 1978.

Dated: May 31, 1978.

BETTE B. ANDERSON, Under Secretary of the Treasury.

Exhibit 13.—Press release, June 9, 1978, concerning revocation of the onecent coin melting ban

The Treasury Department announced today that the regulations prohibiting the exportation, melting or treating of 1-cent pieces have been revoked.

The ban on the exportation, melting or treating of 1-cent coins was imposed by the Secretary of the Treasury in April 1974. The restrictions were placed into effect primarily because high copper prices at the time made it potentially profitable to melt 1-cent coins for their metal content or to export them. Violations of the regulations carried a statutory penalty of up to \$10,000 and/or 5 years imprisonment.

Because of changed economic conditions, including stabilized copper prices and the large inventory of 1-cent coins maintained by the Government, the Department has determined that the prohibitions are no longer necessary. The revocation became effective on June 7, 1978.

Exhibit 14.—Press release, June 26, 1978, concerning appointment of George B. Wright as Officer-in-Charge of the Fort Knox Gold Bullion Depository

Director of the Mint Stella B. Hackel today announced the appointment of Mr. George B. Wright to the position of Officer-in-Charge of the United States Bullion Depository at Fort Knox, Kentucky, effective July 5, 1978. He succeeds Mr. Victor H. Harkin, who retired February 28, 1978.

A major portion of the Nation's gold reserves is stored at the Bullion Depository at Fort Knox. The duties of the Officer-in-Charge entail the responsibility for implementing all protective measures to insure the security of the gold stores in his custody and for coordinating and directing all other activities at the Depository.

Mr. Wright has been employed by the Bureau of the Mint since 1970. Most recently, he has been the Chief of the Management and Organization Division at Bureau headquarters in Washington, D. C. Previously, he held the positions of computer systems analyst, Assistant Financial Manager, Project Manager of the Old San Francisco Mint during the early period of its restoration, and Special Assistant to the Officer-in-Charge of the San Francisco Assay Office.

Prior to his Federal Government employment at the Mint, Mr. Wright served 20 years in the military advancing in rank from Private to Lieutenant Colonel. He retired in June 1970. During his Army career, Mr. Wright served in various financial and administrative positions.

Mr. Wright earned a Bachelor's degree in Business Administration, majoring in accounting, from the University of Georgia. He is married and the father of two children.

Exhibit 15.—Press release, June 30, 1978, concerning closing of ordering period for 1978 proof coin sets

The Bureau of the Mint will stop taking orders for the 1978 six-coin proof sets on June 30, 1978.

Over 3 million sets have been ordered. The 1978 proof coin sets will be produced and mailed through the end of the year. Customers will receive an acknowledgement card indicating when their order will be delivered.

The Mint will be accepting orders this fall for the 12-coin 1978 uncirculated sets. The date for acceptance will be announced later this summer.

The uncirculated sets will contain six 1978 coins produced at the Philadelphia Mint and six coins made at the Denver Mint. The six denominations are a dollar, half dollar, quarter, nickel, dime, and cent.

Individuals who wish to be placed on the Mint's mailing list to receive order forms for the 1978 uncirculated sets should write to the Bureau of the Mint, 55 Mint Street, San Francisco, CA. 94175.

Exhibit 16.—Statement by the Director of the Mint, July 17, 1978, before the Senate Committee on Banking, Housing and Urban Affairs

I appreciate the opportunity to appear before you, Mr. Chairman, in support of legislation which would authorize the issuance of a smaller \$1 coin in replacement of the current \$1 coin. As you noted in your letter to Secretary Blumenthal announcing the hearing, the bill before you, S. 3036, is the same as the Administration's proposal with one notable difference. Instead of the Liberty head design proposed by the Administration, S. 3036 would require the Secretary to place a likeness of Susan B. Anthony on the new coin. Nonetheless, the thrust of both proposals is the same—to improve our coinage system by authorizing a useful coin for our commerce and trade.

Need for the New Coin

The current cupronickel clad dollar was first authorized by Congress in the Act of December 31, 1970, in replacement for the standard silver dollar. That statute repealed the Department's authority to mint and issue the standard 90 percent silver dollar, last struck in 1934, and authorized in its stead a base metal dollar coin having essentially the same size. Thus, the current \$1 coin has a diameter of 1.5 inches and weighs nearly 23 grams.

Since 1971, when the Mint began issuing the clad \$1 coin, it has not become a useful part of our coinage system. Because of the lack of public demand the \$1 coin has represented less than 1 percent of the Mint's annual production each year. Even this minimal demand for the \$1 coin can be primarily attributed to its usage in gaming machines rather than its usefulness as a medium of exchange.

The limited usefulness of the current \$1 coin has been of considerable concern to the Department for several years. It has become increasingly clear that, primarily due to its cumbersome size and weight, the current \$1 coin cannot effectively serve as a medium of exchange. Our views have been reaffirmed by a study conducted by the Research Triangle Institute, completed in 1976, which concluded that a conveniently-sized \$1 coin would significantly broaden the capabilities of consumer cash transactions. Subsequent to the completion of that study, the previous Administration submitted to Congress a report on the "State of the United States Coinage", which, among other recommendations, urged the Congress to authorize the replacement of the \$1 coin with a smaller size coin.

The smaller \$1 coin, which would be authorized by the pending bill, would be sized between the quarter and half-dollar, with a diameter of just over 1 inch and a weight of 8.1 grams. Such a smaller, more conveniently-sized coin would be far more acceptable to the general public and would ultimately gain widespread usage.

Our recommendation to issue a small \$1 coin is part of Treasury's long-range planning of the Nation's coinage and currency system. Other than the smaller \$1, we do not believe that any changes in our coinage system are necessary at this time. Thus, contrary to the previous Administration's recommendation to the Congress, the Department's view is now that the 1-cent coin can and should remain a useful part of our coinage system in the years ahead. Similarly, the Department has no intention at this time to eliminate the half-dollar coins from our coinage system. Rather than seeking statutory repeal of the authority to mint the half-dollar coin, we deem it sufficient to limit production to meet consumer demand.

It is my understanding that, with respect to Federal Reserve notes, the Department plans to produce the volume of 1-dollar notes needed by the Nation's commerce and trade. Of course, it is our hope that, with the introduction of the new \$1 coin, the demand for notes

will gradually decrease and that more notes will be displaced by the \$1 coin. Lastly, while public acceptance of the \$2 Federal Reserve notes has been rather disappointing so far, we are confident that with increased promotional efforts and cooperation by commercial banks and retail firms that denomination will gain increased acceptance.

Technical Considerations

Size, weight, and edge configuration.—In determining the appropriate physical size of a new coin, the Mint has considered several factors, including handling convenience and the potential for counterfeiting or slugging. The recommended weight of 8.1 grams is the lowest possible weight for convenient handling by the general public, while at the same time, being sufficiently heavy to be readily distinguishable from the quarter. The quarter weighs 5.67 grams; thus, the proposed coin would be 43 percent heavier than the quarter.

I should point out, Mr. Chairman, that in the Administration's proposal the weight for the new \$1 is specified as 8.5 grams. However, after submission of our proposal to Congress, we were advised by the coin sorting equipment manufacturers that a \$1 coin with a slightly lower weight would facilitate high speed coin sorting. Since coin sorting machines are used by all major retailers and banks, we feel this is a legitimate consideration; thus, we now recommend that the weight be changed in the proposed bill from 8.5 grams to 8.1 grams.

For the purposes of high utilization in automatic merchandising devices, it is essential that the size of the coin preclude the use of readily available low value foreign coins of identical size to slug the equipment. A diameter of 1.043 inches in size (26.5 millimeters) best meets this requirement and has been endorsed by the major manufacturers of automatic coin handling equipment.

The new \$1 would be distinguishable from the quarter by touch as well as by sight. The design proposed would have an 11-sided inner border on both sides of the coin within the outer circular configuration. This design element would provide a means for tactile recognition by the visually handicapped. At the same time, to prevent counterfeiting, the coin would have a reeded edge as do all other higher value U. S. coins.

Composition.—Except for the two minor denominations, the cent and the nickel, all circulating U. S. coins are made of a cupronickel alloy bonded on both sides to a pure copper core. This composition has many advantages, including superior surface wear and appearance, and relative low cost to produce. Overall, it is approximately 90 percent copper, and can be economically fabricated into coinage strip for high relief coins. Also, the unique electrical properties and density of this cupronickel laminate ("sandwich") make it very difficult to counterfeit or slug.

Many materials—including several copper alloys, titanium, and other clad combinations—were tested to determine the most suitable composition for the new coin. The results of the studies indicate that the best overall material is a 75 percent copper/25 percent nickel alloy clad on a 100 percent copper core.

Further, to prevent the slugging of the new coin by reducing the diameter of the current half-dollar, the thickness of the cupronickel outer layers would be increased. The clad layers would constitute 50 percent of the total thickness of the coin as compared to one-third in our current cupronickel clad on copper coins.

Except for the thickness of the cupronickel cladding for the new smaller \$1 coin, this laminate is the same material now being used in all of our coin denominations other than the 5-cent and 1-cent coins.

Economic considerations

Cost savings.—If the proposed \$1 coin is accepted by the general public, it could result in considerable savings both for our Government and the economy as a whole. The current \$1 coin costs about 8 cents each to produce as compared to the cost for the new coin which will be 3 cents each. This is a savings of greater than 60 percent per coin compared to the

existing coin. Based on the budgeted production for fiscal year 1978, the new coin would save \$4.5 million per year. With increased production generated by successful circulation, the savings would multiply.

The increase in demand for \$1 notes will soon necessitate additional facilities for the Bureau of Engraving and Printing. The \$1 note now represents 60 percent of currency production. A practical \$1 coin which circulates would primarily displace \$1 notes and 25 cent coins. To the extent that it displaces \$1 notes, the required facility expansion for the Bureau of Engraving and Printing, which would cost an estimated \$100 million, could be deferred for decades.

One dollar notes wear out in circulation and must be replaced in approximately 18 months at a cost of 1.8 cents each. Since each coin will last at least 15 years, the coin has, at a minimum, a 10-fold service life advantage. Considering the cost of the coin compared to the note, each coin would save over 80 percent of the production costs for the notes displaced.

Significant cost savings would also result for the Federal Reserve System. As Governor Philip E. Coldwell of the Federal Reserve Board testified before the House Subcommittee on Historical Preservation and Coinage on the small dollar proposal in May of this year:

"The Federal Reserve spent \$48 million for the printing of the new currency in fiscal year 1977. ***Of that \$48 million, \$28 million was spent to print nearly 2 billion \$1 notes. Thus, if all these \$1 notes were replaced by coins, the Federal Reserve would realize savings of \$28 million in printing costs.

"Most new \$1 notes are used to replace worn out notes. On the average, a new \$1 note only lasts for 18 months before it is worn out and destroyed. On the other hand, the new \$1 coin is expected to last for 15 years or more, a greater life expectancy by a factor of 10. Thus, while it costs \$28 million annually to maintain a circulation pool of 2.4 billion \$1 notes, replacing each note every 18 months, it would only cost \$5 million annually to maintain the same size pool of \$1 coins—a savings to the Government of \$23 million each year. If coins only replaced half the \$1 notes, the savings in production costs would still amount to \$11 million.

"...the Federal Reserve would also realize savings in lower handling costs for the coin, compared to the costs of handling notes. ***Our staff estimates the cost for processing 1,000 new coins at 51 cents compared to \$2.19 for processing 1,000 notes, including destruction costs. ***Thus, if \$1 coins replaced half the dollar notes, and if each coin were processed one time per year, the Federal Reserve would save an additional \$2 million, annually, in currency processing costs."

Inflationary impact.—In examining the potential economic impact of the proposal, the Department has also considered whether issuance of the new \$1 coin would have any inflationary effect. Federal Reserve Governor Coldwell in response to a question before the House Subcommittee, stated that he did not think the new coin would present any inflationary problems. The Department agrees with that assessment. We suggest that the increased use of higher value coins in this and other developed countries is the consequence rather than the cause of the general inflationary trend. As the purchasing power of the lowest denomination note declines, the highest value coin becomes a far more necessary component of a Nation's coinage and currency system.

Also, while the new coin would enable the automated merchandising industry to offer a whole range of items not now available in vending machines, the pricing structure would still be governed by market forces. It thus seems reasonable to assume that any automatically vended item priced excessively high would be rejected by the consumer.

Distribution of coins

Production.—At such time as the legislation is approved by the Congress, the Mint would immediately start the contracting process for the necessary coinage strip. This would take approximately 3 months; at that point, we would start the actual production of the coins.

Were the recommended design adopted, approximately 2 months would be required for the Mint to complete the fabrication of dies and the procurement of the production tooling necessary for the new coin, during which time the coinage strip would also be procured.

Our plan is to undertake production at an accelerated rate, producing 500 million pieces of the new coin in 6 months prior to their release to the public. Such a large inventory of coins prior to initial distribution would assure an equitable and adequate supply of coins throughout the Nation.

Circulating efforts.—A task force composed of Treasury and Federal Reserve officials is examining the various ways which would stimulate general acceptance of the new coin. The objective of the task force is to develop recommendations for the effective circulation of the new coin which would, in turn, result in a corresponding reduction in the volume of Federal Reserve notes needed for circulation. In this effort, the Department will certainly need the cooperation of large retail firms, commercial banks, and the general public.

The task force is studying those banks and retail industries which handle significant quantities of coins and currency to identify the advantages of using the new coin. A leading fast food merchandiser estimates that two to three seconds can be saved per retail transaction if the coin is used instead of the \$1 note.

Studies indicate that the greatest difficulty in effectively circulating the new coin will be the required change in habits of retail clerks and bank tellers. An educational program aimed at retailers and banks will be required to overcome this important source of anticipated resistance to the new coin. The support of major retailers and banks will be crucial in this effort.

Only after clear success has been achieved in circulating the new coin could programed reduction of \$1 bill production be considered.

Design.—This takes us to design of the proposed coin, which, Mr. Chairman, has been the center of considerable public attention during the past several months. The Administration has recommended a modern stylized female Liberty head design for the new coin. This historical design appeared on the first U. S. coin minted in 1793 and appeared in various forms on almost all the denominations of our coins through modern times. The female Liberty head is symbolic of and honors all women rather than any particular individual. It is accompanied by a Phrygian Cap, which has been a symbol of freedom for over the past 2,500 years and has repeatedly appeared on our coins.

We believe that it would be most appropriate that the historic Liberty head design once again return to an American coin. However, we fully recognize that many distinguished American men and women have made substantial contributions to our country which are worthy of recognition. Susan B. Anthony, whose likeness would be placed on the new coin under S. 3036 is certainly among them. As a matter of fact, there have been over a 100 different candidates suggested by the general public to the Department for the new coin design, and a number of bills have been introduced in Congress to mandate the portrait of such outstanding Americans as Harriet Tubman, Abigail Adams, Georgia Gray, and Elizabeth Pole for the new coin. With your permission, Mr. Chairman, I would like to submit lists of suggested candidates for the record.

If the Congress desires to select a different design for the coin, be it Susan B. Anthony or any other that of course is its prerogative. While we continue to believe that the Liberty design should be depicted on the coin, the Treasury Department will defer that decision to the Congress. Essential, in our view, is that the new \$1 coin be authorized without undue delay so that we may proceed expeditiously with the production and issuance of the new coin.

This concludes my statement, Mr. Chairman. I will be pleased to answer any questions you may have.

Exhibit 17.—Press release, July 20, 1978, concerning completion of two additional Chief Justice medals

Mrs. Stella B. Hackel, Director of the Mint, today announced the completion of two additional medals of the Chief Justices of the United States Series. The medals honoring Earl Warren and John Rutledge are now available for sale to the public along with those commemorating John Jay and Warren Burger.

The Chief Justice Warren medal, designed by Michael Iacocca, a Sculptor-Engraver at the U.S. Mint in Philadelphia, has the inscription, "14th Chief Justice Earl Warren," surrounding the high relief portrait. The medal honoring the 2d Chief Justice, John Rutledge, was designed by Edgar Steever, also a Sculptor-Engraver at the Philadelphia Mint. Chief Justice Rutledge is depicted in the dress of his day rather than in the robes of the High Court as are the other Chief Justices. The reverse sides of all four medals are inscribed, "The Supreme Court of the United States," and display the seal of the Supreme Court.

Each antique bronze, 3-inch medal may be purchased for \$6 from the Bureau of the Mint sales areas at the Philadelphia Mint, the Denver Mint, the San Francisco Old Mint, and the Main Treasury Building in Washington, D.C. Each medal may also be ordered by mail from the Mint. Please send a money order or check for \$6.30 made payable to the Bureau of the Mint and mail to: Bureau of the Mint, 55 Mint Street, San Francisco, CA 94175.

Exhibit 18.—Statement by Assistant Director of the Mint for Technology Alan J. Goldman, August 25, 1978, before the Senate Committee on Banking, Housing and Urban Affairs

On behalf of the Director of the Mint, I want to express my appreciation for the opportunity to testify on S. 2843, which would provide for the issuance of the one ounce and one-half ounce gold medallions by the Treasury Department. My testimony, Mr. Chairman, will focus on the production and technical considerations raised by the proposal.

S. 2843 provides that, whenever the Secretary determines to sell gold, all or part of the gold offered for sale shall be in the form of one ounce and one-half ounce medallions. If less than 1.5 million ounces of gold is sold in any fiscal year, the bill would require that the entire amount be sold in the form of medallions. If the Secretary determines that more than 1.5 million ounces of gold is to be sold during a fiscal year, the excess of gold over 1.5 million ounces may be sold in such manner as the Secretary deems appropriate.

The bill directs that the medallions be produced from .900 fine gold and that they contain, respectively, one ounce and a half-ounce of .999 fine gold. In the first year of production, the medallions would have to be struck in the ratio of two half-ounce medals for each one ounce medal; meaning, that the Mint would have to strike 2.25 million medals. Subsequently, the ratio of production would be left to the Secretary. The bill would also authorize the Secretary to adjust the production quantities to reflect anticipated market demand after the first year.

The medallions would bear various statutory design elements and inscriptions, including the Great Seal of the United States, the words "United States of America", and would be inscribed with the year of production. While no monetary value would appear on the medallions, they would bear the legends, respectively, "one ounce fine gold" and "one-half ounce fine gold."

We should point out that the Mint has never undertaken a program involving the production of 2.25 million gold medals a year. The recent Bicentennial gold medal program certainly represents no precedent. In contrast to the 2.25 million medallions, the entire Bicentennial program involved the production of less than 40.000 gold medals by the Mint. Nevertheless, if so directed, the Mint would have the production capability of manufactur-

ing 2.25 million gold medallions per year. To do so would, however, require additional equipment, adequate lead time, an increase in Mint personnel ceiling and the necessary funding by the Congress.

In order for the Mint to manufacture 2.25 million gold medallions a year, it would be necessary to procure and install a variety of additional equipment such as blank inspection tables and coin conveyor belts costing approximately \$100,000. It would also be required to modify and rearrange the manufacturing area at the West Point Bullion Depository and Philadelphia Mint, where the gold medallions could be produced. The cost of capital investment, together with the modification expenditures, are estimated to total \$250,000.

The production of the medallions would also necessitate the hiring of an additional 50 employees, including security personnel, for the duration of the program. Taking into account the additional manpower requirement, capital costs, as well as the procurement of fabricated gold medal blanks, the cost of each medallion is estimated at \$2. By far the largest element in this cost would be the fabrication of medal blanks by private industry—approximately \$1.30 per blank. It should be pointed out that this cost figure assumes that the Mint would supply fine gold to the commercial fabricators rather than 900 fine coin gold. Supplying the latter would require an additional refining charge of approximately 50 cents per blank.

For the premium quality medallions, the manufacturing and packaging cost is estimated at \$5 for each medallion. In addition, depending on the method of marketing, there could be additional promotional, mailing, and shipping costs involved. For example, if the medallions were shipped by registered mail to the purchaser, the registry and postal charges would cost \$3 to \$4 for each medallion at today's postal rates. The sales price would thus have to include the production and other costs in addition to the bullion value of the medallions.

While the Mint has general statutory authority to reimburse its appropriations for the manufacturing and marketing expenses from medal sales proceeds, without additional funding by Congress the Mint would not be able to begin this program. Using the lowest estimated unit cost of production for the medallions, it could cost the Mint approximately \$1 million to start up the program. This would cover the necessary capital and personnel expenditures and fabrication costs for an initial quantity of 500,000 blanks.

Assuming that the 500,000 medallions would be sold, the Mint could reimburse its appropriations from the proceeds of the sales and could thus continue producing the medallions. It should be emphasized, however, that if the sales fail to materialize, the program costs would be borne entirely by the Mint and thus total appropriations of approximately \$5 million would have to be made by the Congress for the production of 2.25 million medallions.

This completes my prepared statement, Mr. Chairman. I will be pleased to answer any questions which you or any other members of the Committee may have.

Exhibit 19.—Press release, August 28, 1978, concerning acceptance of orders for 1978 uncirculated coin sets

Mint Director, Stella B. Hackel, announced today that orders for the 1978 uncirculated coin sets will be accepted beginning September 1, 1978, at the San Francisco Old Mint. The 1978 uncirculated coin sets will be sold for \$7 each with a limit of five sets per customer. "We are pleased that the selling price has not increased," Mrs. Hackel said.

The 1978 uncirculated coin sets contain 12 coins-a dollar, half dollar, quarter, nickel, dime, and cent from the Denver Mint and the same denominations from the Philadelphia Mint. The six coins from the Denver Mint have the "D" mint mark and are sealed in redstriped polyester film. The six coins from the Philadelphia Mint, which have no mint mark, are sealed in blue-striped polyester film. Both are inserted in a presentation envelope.

Since limited production and mailing capability make it necessary to limit the ordering period for these sets, Mrs. Hackel urged individuals interested in obtaining 1978 uncirculated coin sets to order as soon as possible. Orders will be accepted for approximately 2 months, and the sets will be mailed by the end of December. The Mint must reserve the right to cancel any orders which exceed production capacity.

The Director noted that those individuals already on the Mint mailing list would soon receive their order cards. Individuals not on the mailing list may order sets by writing to the Bureau of the Mint in San Francisco. They should indicate the number of sets they wish to order (limit of five sets per individual), their name, address, and enclose a check or money order payable to the Bureau of the Mint. Orders should be mailed to: Bureau of the Mint, 55 Mint Street, San Francisco, CA 94175.





Tables

Table 1.—U.S. coins manufactured, fiscal year 1978

[For metallic composition see table 4]

I SUMMARY

	General ci	rculation	Numis	matic 1	Total coinage		
Denomination _	Number of pieces	Face value	Number of pieces	Face value	Number of pieces	Face value	
1 dollar:							
Cupronickel.	37,598,006	\$37,598,006.00	3,096,815	\$3,096,815.00	40,694,821	\$40,694,821.00	
Silver clad			131,908	131,908.00	131,908	131,908.00	
50 cents:							
Cupronickel.	33,588,506	16,794,253.00	3,096,815	1,548,407.50	36,685.321	18,342,660.50	
Silver clad	*		131,908	65,954.00	131,908	65,954.00	
25 cents:							
Cupronickel.	² 792,886,378	198,221,594.50	3,096,815	774,203.75	795,983,193	198,995,798.25	
Silver clad			131,908	32,977.00	131,908	32,977.00	
10 cents	993,856,628	99,385,662.80	3,096,815	309,681.50	996,953,443	99,695,344.30	
5 cents	676,286,872	33,814,343.60	3,096,815	154,840.75	679,383,687	33,969,184.35	
1 cent	3 9,529,021,700	95,290,217.00	3,096,815	30,968.15	9,532,118,515	95,321,185.15	
Total	12,063,238,090	481,104,076.90	18,976,614	6,145,755.65	12,082,214,704	487,249,832.55	

II. NUMBER AND FACE VALUE OF COINS PRODUCED, PHILADELPHIA AND DENVER MINTS

	Philadelph	ia Mint	Denve	Denver Mint		Total coinage	
Denomination -	Number of pieces	Face value	Number of pieces	Face value	Number of pieces	Face value	
1 dollar:							
Cupronickel.	13,736,000	\$13,736,000.00	23,862,006	\$23,862,006.00	37,598,006	\$37,598,006.00	
50 cents	15,692,000	7,846,000.00	17,896,506	8,948,253.00	33,588,506	16,794,253.00	
25 cents	523,768,000	130,942,000.00	253,766,378	63,441,594.50	777,534,378	194,383,594.50	
10 cents	700,010,000	70,001,000.00	293,846,628	29,384,662.80	993,856,628	99,385,662.80	
5 cents	406,716,000	20,335,800.00	269,570,872	13,478,543.60	676,286,872	33,814,343.60	
1 cent	3,600,215,000	36,002,150.00	4,290,576,700	42,905,767.00	7,890,791,700	78,907,917.00	
Total	5,260,137,000	278,862,950.00	5,149,519,090	182,020,826.90	10,409,656,090	460,883,776.90	

III. NUMBER AND FACE VALUE OF COINS PRODUCED, SAN FRANCISCO ASSAY OFFICE

Danamination	General c	irculation	Numis	Numismatic		Total coinage	
Denomination -	Number of pieces	Face value	Number of pieces	Face value	Number of pieces	Face value	
1 dollar:							
Cupronickel			3,096,815	\$3,096,815.00	3,096,815	\$3,096,815.00	
Silver clad			131,908	131,908.00	131,908	131,908.00	
50 cents:							
Cupronickel			3,096,815	1,548,407.50	3,096,815	1,548,407.50	
			131,908	65,954.00	131,908	65,954.00	
25 cents:						00,70	
Cupronickel			3,096,815	774,203.75	3,096,815	774,203.75	
Silver clad			131.908	32,977.00	131,908	32,977.00	
10 cents			3,096,815	309,681.50	3,096,815	309,681.50	
			3,096,815	154,840.75	3,096,815	154,840.75	
1 cent		\$927,300.00		30,968.15	95,826,815	958,268.15	
Total	92,730,000	927,300.00	18,976,614	6,145,755.65	111,706,614	7,073,055.65	

¹ All numismatic coins were manufactured at the U.S. Assay Office, San Francisco, and included 2,050,556 1978 proof sets, 1,046,259 1977 proof sets, 110,044 Bicentennial proof sets, and 21,864 Bicentennial uncirculated sets.

Note. The manufacture of Bicentennial coins was discontinued on Dec. 31, 1976, however, silver-clad sets continued to be packaged and sold after that date. Such coins reported in this table constitute those sets sold during fiscal year 1978.

² Includes 15,352,000 quarter dollars produced at the U.S. Bullion Depository, West Point.

³ Includes 1,545,500,000 1-cent coins produced at the U.S. Bullion Depository at West Point.

^{&#}x27; For general circulation.

TABLE 2.—Subsidiary clad coins manufactured under the Coinage Act of 1965, 1971-September 1978

		Number o	f pieces	
Calendar year or month	Half dollars	Quarter dollars	Dimes	Total subsidiary coinage
1971 1	460,485,562	371,142,566	543,828,378	1,375,456,506
1972 2	298,337,667	529,383,399	765,097,667	1,592,818,733
1973 ³	150,905,024	582,671,024	773,472,050	1,507,048,098
19744	193,848,350	587,286,350	1,043,948,350	1,825,083,050
1975 5	475,946,493	1,394,516,493	902,288,569	2,772,751,55
1976 6	149,952,590	859,928,181	1,268,132,504	2,278,013,275
Total 1971-76	1,729,475,686	4,324,928,013	5,296,767,518	11,351,171,21
January	12,925,865	53,791,865	89,910,000	156,627,730
February	4,530,555	19,118,555	55,890,004	79,539,114
March	8,009,363	65,749,363	123,350,000	197,108,72
April	9,294,407	46,378,407	136,558,500	192,231,31
May	7,227,309	44,417,309	123,809,006	175,453,62
June	11,420,491	85,368,491	140,031,015	236,819,99
Subtotal JanJune 1977	53,407,990	314,823,990	669,548,525	1,037,780,50
	6,395,852	50,129,852	83,495,471	140,021,17
August	5,235,353	74,031,353	79,996,095	159,262,80
September	6,510,693	69,368,693	80,108,802	155,988,18
October	589,978	61,955,978	88,599,903	151,145,85
November	2,204,858	82,570,858	96,273,966	181,049,68
December	4,172,936	75,670,808	78,765,618	158,609,36
Subtotal July-Dec. 1977	25,109,670	413,727,542	507,239,855	946,077,06
Total JanDec. 1977	78,517,660	728,551,532	1,176,788,380	1,983,857,57
January	4,517,616	44,241,616	65,600,004	114,359,23
February	4,403,254	49,685,254	71,999,002	126,087,51
March	4,500,603	78,136,603	76,540,000	159,177,20
April	3,065,647	60,299,647	89,898,000	153,263,29
May	4,841,077	61,097,077	104,082,874	170,021,02
June	7,999,685	53,411,685	84,662,891	146,074,26
Subtotal JanJune 1978*	29,327,882	346,871,882	492,782,771	868,982,53
July	235,763	48,467,763	56,750,389	105,453,91
August	66,705	101,142,705	100,475,293	201,684,70
September	219,107	79,435,107	83,305,503	162,959,71
Subtotal July-Sept. 1978 °	521,575	229,045,575	240,531,185	470,098,333
Cumulative total	1,837,842,803	5,629,397,002	7,206,869,854	14,674,109,659

¹ Includes 3,224,138 proof coin sets, i.e., 3,224,138 coins of each denomination (9,672,414 subsidiary coins).

NOTE.—All special mint and proof coins from 1971 through September 1978 were manufactured at the San Francisco Assay Office. See also note to table 1.

² Includes 3,267,667 proof coin sets, i.e., 3,267,667 coins of each denomination (9,803,001 subsidiary coins).

³ Includes 2,769,624 proof sets, i.e., 2,769,624 coins of each denomination (8,309,872 subsidiary coins).

⁴ Includes 2,617,350 proof sets, i.e., 2,617,350 coins of each denomination (7,852,050 subsidiary coins).

⁵ Includes 2,909,369 regular proof coin sets, i.e., 2,909,369 coins of each denomination (8,728,107 subsidiary coins); 2,250,302 Bicentennial proof 40-percent silver-clad half dollars and quarters and 2,841,522 Bicentennial uncirculated 40-percent silver-clad half dollars and quarters.

⁶ Includes 4,149,730 regular proof sets, i.e., 4,149,730 coins of each denomination (12,449,190 subsidiary coins); 1,045,412 Bicentennial proof 40-percent silver-clad half dollars and quarters; and 1,398,200 Bicentennial uncirculated 40-percent silver-clad half dollars and quarters.

⁷ Includes 3,251,152 regular proof sets, i.e., 3,251,152 coins of each denomination (9,753,456 subsidiary coins); 148,608 Bicentennial proof 40-percent silver-clad half dollars and quarters; and 70,794 Bicentennial uncirculated 40-percent silver-clad half dollars and quarters.

^{*}Includes 1,558,371 regular proof sets, i.e., 1,558,371 coins of each denomination (4,675,113 subsidiary coins); 22,818 Bicentennial proof 40-percent silver-clad half dollars and quarters; and 12,293 Bicentennial uncirculated 40-percent silver-clad half dollars and quarters.

^{*}Includes 492,185 regular proof sets, i.e., 492,185 coins of each denomination (1,476,555 subsidiary coins); 17,782 Bicentennial proof 40-percent silver clad half dollars and quarters; and 2,608 Bicentennial uncirculated 40-percent silver clad half dollars and quarters.

TABLE 3.—Production of Kennedy half dollars, fiscal years 1964-78
[Number of pieces]

Fiscal year .		For general	circulation		Proof and		
	90 percent silver 1	40 percent silver 2	Nonsilver clad ³	Total	Special Mint coins 4	Total	
1964	91,851,612.	• • • • • • • • • • • • • • •		91,851,612	1,864,859	93,716,471	
1965	192,536,358.			192,536,358	2,085,903	194,622,261	
1966	145,121,480	54,533,338		199,654,818	2,350,000	202,004,818	
1967		300,476,355		300,476,355	2,968,734	303,445,089	
1968		307,314,000		307,314,000	2,438,263	309,752,26.	
1969		100,011,930		100,011,930	3,468,945	103,480,87	
1970		79,787,800 .		79,787,800	2,435,255	82,223,055	
1971		5 2,150,000	278,909,904	281,059,904	63,175,571	284,235,475	
1972			352,933,520	352,933,520	2,545,587	355,479,10	
1973			215,687,700	215,687,700	3,018,002	218,705,702	
1974			126,573,600	126,573,600	3,241,388	129,814,988	
1975			407,663,100	407,663,100	7 1,332,139	408,995,239	
1976			292,109,349	292,109,349	8 11,314,955	303,424,304	
July-Sept. 1976.			51,200	51,200	9 1,440,637	1,491,83	
1977			98,275,999	98,275,999	10 4, 185, 601	102,461,600	
1978			33,588,506	33,588,506	11 3,228,723	36,817,229	
Total	429,509,450	844,273,423	1,805,792,878	3,079,575,751	51,094,562	3,130,670,31	

¹ Composition of coins was 900 parts silver and 100 parts copper.

Table 4.—Specifications, metallic composition, and designs of U.S. coins Specifications

Denomination	Face Shape Type of.		Diameter		Thickness		Standard gross weight		
Denomination	value	of coins		Inches	Milli- meters	Inches	Milli- meters	Grains	Grams
Dollar: 1									
Silver clad ² 3	1 dollar	Round.	Milled	1.500	38.10	0.100	2.54	379.51	24.592
Cupronickel	do	do	do	1.500	38.10	.100	2.54	350.00	22.680
Half dollar:									
Silver clad ³	50 cents	do	do	1.205	30.61	.086	2.18	177.50	11.500
Cupronickel	do	do	do	1.205	30.61	.086	2.18	175.00	11.340
Quarter dollar:									
Silver clad ³	25 cents	do	do	.955	24.26	.067	1.70	88.73	5.750
Cupronickel	do	do	do	.955	24.26	.067	1.70	87.50	5.670
Dime				.705	17.91	.053	1.35	35.00	2.268
5-cent piece	5 cents	do	Smooth	.835	21.21	.078	1.98	77.16	5.000
1-cent piece				.750	19.05	.062	1.57	48.00	3.110

Footnotes at end of table.

² 3-layer composite coin: outer cladding 800 parts silver, 200 parts copper bonded to a core of approximately 209 parts silver, 791 parts copper. The average silver content was 40 percent of the standard gross weight.

³ Outer cladding 75 percent copper, 25 percent nickel, bonded to a core of pure copper.

⁴ Available only in sets.

⁵ Produced for inclusion in uncirculated sets with overrun for replacement of lost sets.

⁶ Consists of 1,432,678 coins of 40 percent silver and 1,742,893 nonsilver clad coins.

⁷ Consists of 1,330,909 1974-dated nonsilver clad coins, 34 Bicentennial nonsilver clad coins, and 1,196 Bicentennial 40-percent silver clad coins.

⁸ Consists of 4,626,623 Bicentennial nonsilver clad coins and 6,688,332 Bicentennial 40-percent silver clad coins.

⁹ Consists of 850,183 Bicentennial nonsilver clad coins and 590,454 Bicentennial 40-percent silver clad coins.

¹⁰ Consists of 2,204,893 1977 dated nonsilver clad coins, 1,582,259 Bicentennial nonsilver clad coins, and 398,449 Bicentennial 40-percent silver clad coins.

¹¹ Consists of 3,096,815 nonsilver clad coins and 131,908 Bicentennial 40-percent silver clad coins.

TABLE 4.—Specifications, metallic composition, and designs of U.S. coins—Continued

METALLIC COMPOSITION

Denomination	Туре	Proportions of metals
Dollar:		
Silver clad ² 3	. 3-layer composite	Outer cladding 800 parts silver, 200 parts copper, bonded to a core of approximately 209 parts silver and 791 parts copper.
Cupronickel 4	do	Outer cladding 75 percent copper, 25 percent nickel, bonded to a core of pure copper.
Half dollar:		
Silver clad ³	do	Outer cladding 800 parts silver, 200 parts copper, bonded to a core of approximately 209 parts silver and 791 parts copper.
Cupronickel	do	Outer cladding 75 percent copper, 25 percent nickel, bonded to a core of pure copper.
Quarter dollar:		
	do	Outer cladding 800 parts silver, 200 parts copper, bonded to a core of approximately 209 parts silver and 791 parts copper.
Cupronickel	do	Outer cladding 75 percent copper, 25 percent nickel, bonded to a core of pure copper.
Dime	do	Do.
5-cent piece	. Homogeneous alloy	75 percent copper, 25 percent nickel.
1-cent piece	do	95 percent copper, 5 percent zinc.

DESIGNS ON COINS⁵

Denomination	Portraits on obverse	Reverse	First coined	First issued
Dollar:				
Regular	Dwight D. Eisenhower.	Eagle symbolic of the Apollo 11 Moon landing.	June 1971	November 1971.
Bicentennial ³	do	Liberty Bell overlapping Moon.	March 1975	October 1975.
Half dollar:				
Regular	John F. Kennedy	Presidential coat of arms.	February 1964N	March 1964.
Bicentennial ³ Quarter dollar:	do	Independence Hall	April 1975J	uly 1975.
		Eagle		
Dime5-cent piece	Franklin D. Roosevelt Thomas Jefferson	Torch of Liberty Monticello Lincoln Memorial 6	January 1946 J October 1938 N	anuary 1946.

¹ Amendments to the Coinage Act of 1965, Public Law 91-607, Dec. 3l, 1970, authorized the Secretary of the Treasury to mint dollar coins.

² Public Law 91-607, authorized the Secretary of the Treasury to mint and issue not more than 150,000,000 silver-clad dollars. These numismatic coins were first released in August 1971.

^a Public Law 93-127, Oct. 18, 1973, authorized the Secretary of the Treasury to mint dollar, half-dollar, and quarter-dollar coins with designs on the reverse emblematic of the Bicentennial of the American Revolution. This law provided that these coins could be produced but not issued prior to July 4, 1975. The same legislation authorized the Secretary of the Treasury to mint 45,000,000 silver-clad coins (of the 150,000,000 authorized under the act of Dec. 31, 1970) of the same designs for inclusion in special 3-coin proof and uncirculated sets. Production of Bicentennial coins was discontinued on Dec. 31, 1976.

⁴ Dollars for general circulation were authorized by Public Law 91-607, and were first manufactured and issued during fiscal 1972. Coins with identical characteristics were made in proof quality for inclusion in proof coin sets beginning in January 1973.

⁵ The design of a U.S. coin may not be changed more frequently than once in 25 years, except by act of Congress.

⁶ The Abraham Lincoln 1-cent piece with wheat wreath design on the reverse was coined from June 1909 through December 1958.

TABLES 49

Table 5.—Consumption of metals in the manufacture of U.S. coins, fiscal year 1978

[Based on standard weight of individual coins. See table 4]

	Metallic content — short tons						
Denomination	Silver	Copper	Nickel	Zinc	Total		
Dollars:							
Regular issue		861.67	78.30		939.97		
Cupronickel		70.97	6.45		77.42		
Silver clad	1.43	2.15 .	• • • • • • • • • • • • • • • • • • • •		3.58		
Total	1.43	934.79	84.75		1,020.97		
Half dollars:		20.4.00	34.05				
Regular issue		384.89	34.97		419.86		
Cupronickel		35.49			38.71		
Silver clad	.67	1.00 .	• • • • • • • • • • • • • • • • • • • •		1.67		
Total	.67	421.38	38.19		460.24		
Quarter dollars: Regular issue		4,542.82	412.80		4,955.62		
Numismatic: Cupronickel		17.75	1.61		19.36		
Silver clad	.34	.50 .		• • • • • • • • • • • •	.84		
Total	.34	4,561.07	414.41		4,975.82		
Dimes:		· · · ·					
Regular issue		2,277.71			2,484.68		
Proof coins		7.10	.64	* * * * * * * * * * * * *	7.74		
Total		2,284.81	207.61	• • • • • • • • • • • • • • • • • • • •	2,492.42		
5-cent pieces:							
Regular issue		2,795.54		• • • • • • • • • • • • • • • • • • • •	3,727.39		
Proof coins		12.80	4.27		17.07		
Total	• • • • • • • • • • • • • • • • • • • •	2,808.34	936.12		3,744.46		
1-cent pieces:							
Regular issue				1,633.36	32,667.28		
Proof coins		10.09 .		.53	10.62		
Total		31,044.01 .		1,633.89	32,677.90		
Summary:							
Regular issue		41,896.55	1,664.89	1,633.36	45,194.80		
Cupronickel		124.21		• • • • • • • • • • • • • • • • • • • •	135.49		
Silver clad	2.44				6.09		
Proof coins		29.99	4.91	.53	35.43		
Grand total	2.44	42,054.40	1,681.08	1,633.89	45,371.81		

TABLE 6.—Shipments by the Bureau of the Mint of newly manufactured U.S. coins for general circulation, fiscal years 1976, 1977, and 1978

Denomination	Number of coins	Face value	Gross weight
		FISCAL YEAR 1976	
			Short tons
l dollar	146,400,000	\$146,400,000.00	3,660.06
50 cents	239,900,000	119,950,000.00	2,998.80
25 cents	1,072,000,000	268,000,000.00	6,700.11
10 cents	874,400,000	87,440,000.00	2,186.04
5 cents	618,200,000	30,910,000.00	3,407.24
1 cent	7,711,700,000	77,117,000.00	26,437.16
Total	10,662,600,000	729,817,000.00	45,389.41
		FISCAL YEAR 1977	
			Short tons
1 dollar	50,600,000	\$50,600,000.00	1,265.02
50 cents	75,200,000	37,600,000.00	940.02
25 cents	729,200,000	182,300,000.00	4,557.58
10 cents	814,500,000	81,450,000.00	2,036.28
5 cents	673,700,000	33,685,000.00	3,713.13
1 cent	8,362,600,000	83,626,000.00	28,668.56
Total	10,705,800,000	469,261,000.00	41,180.59
		FISCAL YEAR 1978	
			Short tons
1 dollar	50,000,000	\$50,000,000.00	1,250.02
50 cents	78,400,000	39,200,000.00	980.02
25 cents	997,900,000	249,475,000.00	6,236.98
10 cents	1,184,600,000	118,460,000.00	2,961.55
5 cents	951,300,000	47,565,000.00	5,243.14
l cent	10,185,800,000	101,858,000.00	34,918.83
Total	13,448,000,000	606,558,000.00	51,590.54

Note.—Coins are shipped for distribution through the facilities of the 12 Federal Reserve banks, their 25 branches, and the U.S. Treasury, Washington, D.C.

TABLES 51

TABLE 7.—Inventories of U.S. coins Sept. 30, 1977, and Sept. 30, 1978

[Number of pieces]

_		Sept. 30, 1977			Sept. 30, 1978		
Denomination Mints	Mints	Federal Reserve banks and U.S. Treasury	Total	Mints	Federal Reserve banks and U.S. Treasury	Total	
l dollar	46,900,000	44,900,117	91,800,117	34,600,000	31,583,062	66,183,062	
50 cents	. 135,200,000	89,295,644	224,495,644	90,500,000	68,467,734	158,967,734	
25 cents	535,700,000	522,702,776	1,058,402,776	330,900,000	517,496,968	848,396,968	
10 cents	924,200,000	713,477,910	1,637,677,910	733,400,000	717,088,140	1,450,488,140	
5 cents	698,000,000	358,743,600	1,056,743,600	423,100,000	386,717,760	809,817,760	
1 cent	2,271,700,000	664,031,300	2,935,731,300	1,615,100,000	917,016,500	2,532,116,500	
Total	4,611,700,000	2,393,151,347	7,004,851,347	3,227,600,000	2,638,370,164	5,865,970,164	

TABLE 8.—Location of U.S. fractional coins on selected dates, June 1970– September 1978

[Face value of 50, 25, 10, 5, and 1 cent denominations combined]

End of month	Held by the Treasury	Held by the Federal Reserve banks	In circulation 1	Total outstanding
1970:				
June	\$13,924,455	\$217,401,466	\$5,646,416,079	\$5,877,742,000
December	23,358,707	220,410,604	5,799,729,689	6,043,499,000
1971:				
June	44,286,259	282,535,012	5,989,912,729	6,316,734,000
December	44,321,753	241,795,654	6,209,125,593	6,495,243,000
1972:				
June	87,774,629	267,578,476	6,383,441,895	6,738,795,000
December	52,945,004	268,083,504	6,615,295,492	6,936,324,000
1973:				
June	95,011,636	263,581,703	6,793,148,661	7,151,742,000
December	68,546,158	243,297,881	7,025,749,961	7,337,594,000
1974:				
June	45,784,085	201,854,697	7,274,671,218	7,522,310,000
December	52,996,828	221,644,601	7,538,733,571	7,813,375,000
1975:				
June	195,857,040	340,503,927	7,680,844,033	8,217,205,000
December	240,649,199	314,168,058	8,055,607,743	8,610,425,000
1976:				
June	297,681,403	298,983,684	8,303,747,913	8,900,413,000
December	314,045,040	322,948,625	8,517,752,335	9,154,746,000
1977:				
January	343,528,908	352,916,982	8,499,622,110	9,196,068,000
February	356,651,563	344,630,155	8,511,930,282	9,213,212,000
March	375,469,724	311,991,552	8,573,639,724	9,261,101,000
April	374,551,952	296,645,539	8,631,903,509	9,303,101,000
May	369,458,040	274,395,884	8,697,614,076	9,341,468,000
June	375,946,336	267,613,613	8,750,232,051	9,393,792,000
July	360,451,847	272,581,676	8,794,059,477	9,427,093,000
August	366,971,322	241,356,191	8,858,403,487	9,466,731,000
September	364,756,378	264,441,342	8,876,810,280	9,506,008,000
October	347,244,573	267,064,109	8,925,781,318	9,540,090,000
November	331,419,203	243,446,155	9,005,584,642	9,580,450,000
December	319,419,835	241,713,059	9,057,910,106	9,619,043,000
1978:				
January	313,315,817	289,873,915	9,045,106,268	9,648,296,000
February	315,717,702	298,967,372	9,065,020,926	9,679,706,000
March	327,109,127	282,151,722	9,112,669,151	9,721,930,000
April	310,934,494	285,310,680	9,162,261,826	9,758,507,000
May	294,118,803	253,355,390	9,250,233,807	9,797,708,000
June	272,747,350	235,805,741	9,324,197,909	9,832,751,000
July	250,445,342	231,645,890	9,375,661,768	9,857,753,000
August	243,672,204	240,815,913	9,422,635,883	9,907,124,000
September	245,861,537	260,787,687	9,440,596,776	9,947,246,000

¹ Includes coins in commercial banks and coins held by the public.

SOURCE.—"Monthly Statement of United States Currency and Coin," Bureau of Government Financial Operations, Department of the Treasury.

TABLES 53

Table 9.—Location of U.S. clad dollars on selected dates, July 1971– September 1978

[Face value]

End of month	Held by the Treasury	Held by the Federal Reserve banks	In circulation 1	Total outstanding
1971:				
July December	\$7,749,000 14,391,505	\$18,022,951	\$83,966,544	\$7,749,000 116,381,000
June December	28,549,115 47,365,037	50,415,192 44,625,301	151,116,693 189,637,662	
1973:	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	11,020,001	10,,00,,002	201,020,000
June December	21,719,291 6,702,505	40,804,999 27,434,158	223,098,710 251,451,337	
1974: June	11,418,589	16,135,321	283,174,090	310,728,000
December	17,850,433	19,109,238	310,917,329	
June December	28,167,243 66,797,902	18,697,096 30,778,374	333,784,661 421,954,724	380,649,000 519,531,000
1976:	00,777,702	30,770,374	421,734,724	317,331,000
June December	74,753,596 51,868,293	36,716,338 42,621,004	459,017,066 483,877,703	
1977:	50.0/0.003	50 =		
January February	52,968,093 51,882,740	41,458,714 41,486,577	488,247,193 490,686,683	
March	52,470,032	47,417,501	491,365,467	
April	49,276,960	44,310,093	501,176,947	594,764,000
May	48,961,350	46,851,171	502,766,479	
June	48,862,073	46,200,542	506,521,385	
July	51,101,428	45,181,349	510,347,223	
August	50,569,361	42,492,612	515,847,027	
September	53,531,400	44,053,879	517,149,721	614,735,000
October	52,517,188 52,621,782	42,722,774 43,151,390	523,255,038	
November	55,385,164	40,135,746	527,844,828 531,550,090	
1978:	33,363,104	40,133,740	331,330,070	027,071,000
January	53,531,702	43,390,530	533,355,768	630,278,000
February	53,786,229	40,878,389	537,262,382	
March	52,636,832	39,518,186	542,710,982	
April	53,083,397	37,890,138	548,418,465	
May	53,494,929	33,587,853	556,883,218	643,966,000
June	49,829,627	49,041,422	549,278,951	648,150,000
July	47,998,586	43,359,486	558,809,928	650,168,000
August	39,148,586	41,723,342	569,296,072	650,168,000
September	38,514,186	32,364,565	581,398,249	

¹ Includes coins in commercial banks and coins held by the public.

Source.—"Monthly Statement of United States Currency and Coin," Bureau of Government Financial Operations, Department of the Treasury.

TABLE 10.—Summary of uncurrent U.S. coins withdrawn from circulation, fiscal years 1977 and 1978

	Fiscal year	1977	Fiscal year 1978		
Denomination	Pieces Face value		Pieces	Face value	
Standard silver dollars					
Cupronickel dollars.	45,217	\$45,217	13,371	\$13,37	
50 cents	145,884	72,942	58,032	29,01	
25 cents	1,702,949	425,737	848,042	212,01	
0 cents	2,670,786	267,079	1,622,382	162,23	
5 cents	1,706,735	85,337	1,152,600	57,630	
1 cent	7,878,171	78,782	5,196,537	51,96	
Total	14,149,742	975,094	8,890,964	526,23	

NOTE.—Represents coins received at mint institutions.

TABLES 55

Table 11.—Medals produced by the Philadelphia Mint, fiscal years 1976-78

Medals		Number of medals produced		
List No.	Subject	Fiscal year 1976	Fiscal year 1977	Fiscal year 1978
	Presidential			
101 George Was	shington	2,092	714	1,133
	s	452.		
	ferson	1,182	225	010
	son			• • • • • • • • • • • • • • • • • • • •
	oe			
	y Adams			
	Buren.			
	nry Harrison			
*	olk			
112 Zachary Ta	ylor			
	more			
	rce			
	anan			
	ncoln	2,368	1,594	
	inson			
•	B. Hayes			
	arfield			
	Arthur			
	veland			
23 Benjamin H	arrison			
	Kinley			
	oosevelt			
	Taft			
	Vilson Harding			
	idge			
	over			
	Roosevelt		• • • • • • • • • • • • • • • • • • • •	53
32 Harry S. Tr	uman	979	3,639	1,38
	Eisenhower (1st term)	,		
	Eisenhower (2d term)			
	nnedy	2,543	1,993	-,
	Johnson (1st term)			482
	Johnson (2d term)			40.
	Nixon (2d term)	,		
	Ford	2,414		
	er			
Total P	residential series	28,143	11,335	8,091
	Secretaries of the Treasury			
	familton			
	ndom			
	rlisle			
	age			
	haw			
	Cortelyou			
08 Franklin Ma	cVeagh	200.		
09 William Mc	Adoo			
	Mellon			
	fills			
	Woodingenthau, Jr			
	nson			
is ried Mr. VII	IISOII	173.		

TABLE 11.—Medals produced by the Philadelphia Mint, fiscal years 1976-78—Continued

Medals	Number of medals produced		
List Subject No.	Fiscal year 1976	Fiscal year 1977	Fiscal year 1978
Secretaries of the Treasury—Continued			
216 John W. Snyder	165 168		172 107
220 Henry H. Fowler	121 162	223	208
223 David M. Kennedy 224 John B. Connally. 225 George P. Shultz. 226 William E. Simon	108 116 386	 	
227 W. Michael Blumenthal			1,168
			-,,,,,
Directors of the Mint 301 David Rittenhouse, Philadelphia, Pa	153 166 170 170 160 172 174 		163
Army			
401 Washington before Boston 402 Maj. Gen. Gates, for Saratoga 403 Brig. Gen. Morgan, for Cowpens 404 Lt. Col. John E. Howard, for Cowpens 405 Lt. Col. W.A. Washington, for Cowpens 406 Count DeFleury, for Stony Point 407 Maj. Gen. Anthony Wayne, for Stony Point 408 Maj. Gen. Nathaniel Greene for Eutaw Springs 409 Maj. Henry Lee, Paulus Hook 410 Maj. Gen. Scott, for Chippewa and Niagara 411 Maj. Gen. Gaines, for Fort Erie 412 Maj. Gen. Porter, for Chippewa, Niagara and Erie 413 Maj. Gen. Brown, for Chippewa, Niagara and Erie 414 Brig. Gen. Miller, for Chippewa, Niagara and Erie 415 Brig. Gen. Ripley, for Chippewa, Niagara and Erie 416 Maj. Gen. Macomb, Battle of Plattsburg 417 Maj. Gen. Jackson, Battle of New Orleans	218 297 772 176 533 322 334 159 287 269 272 170 322 312		206

TABLES 57

TABLE 11.—Medals produced by the Philadelphia Mint, fiscal years 1976-78—Continued

	Medals	Number of medals produced		
List No.		Fiscal year 1976	Fiscal year 1977	Fiscal year 1978
_				
	Army—Continued			
119	Gov. Isaac Shelby, for Thames			
120	Col. George Croghan, for Sandusky			
121 122	Maj. Gen. Taylor, for Palo Alto			
123	Maj. Gen. Taylor, for Buena Vista			
124	Maj. Gen. Scott, for battles in Mexico			
125	Maj. Gen. Grant			
127	Maj. Gen. Scott (Commonwealth of Virginia)			
128	Kittanning destroyed			
129	200th Anniversary of the Army	3,157	689	1,52
	Total Army series	12,220	689	2,46
	Navy			
501	John Paul Jones, for Serapis			
502	Capt. Thomas Truxtun, for action with La Vengeance			
03	Capt. Preble before Tripoli			
04	Capt. Hull, for capture of Guerriere			
505 506	Capt. Jacob Jones, for capture of Frolic			10
07	Capt. Becattle, for capture of Macedonian			
08	Capt. Burrows, for capture of Boxer			
09	Lt. McCall, for capture of Boxer			
10	Capt. Perry, capture of British Fleet on Lake Erie	161	108	24
11	Capt. Elliott, capture of British Fleet on Lake Erie			
12	Capt. Lawrence, capture of Peacock	167.		
13	Capt. Macdonough, capture of British Fleet on Lake	267		
514	Capt. Henley, capture of British Fleet on Lake	207.		
	Champlain	154.		
15	Lt. Cassin, capture of British Fleet on Lake	305		
16	Capt. Warrington, capture of Epervier			
17	Capt. Blakely, capture of Reindeer			
18	Capt. Biddle, capture of Penguin			
19	Capt. Stewart, capture of Cyane and Levant	266.		
20	Rescue of officers and crew of brig Sommers	160	110	
521	Capt. Ingraham	162.		
522	Capt. Perry (State of Pennsylvania) capture of fleet	270		
: 22 <i>/</i>	on Lake Erie		107 .	
523	Cornelius Vanderbilt		107.	
	To Rescuers of Passengers, Officers & Men of			
	Steamship San Francisco, by Congress	233.		10-
526				
27	Metis (shipwreck) Medal			
28	John Horn			
29	Lt. Victor Blue (State of South Carolina)			
32 33	Departure of American Fleet			
34	200th Anniversary of the Navy	3,114	9,843	
35	200th Anniversary of the Marine Corps		2,840	
	Total Navy series	13,389	13,008	1,775
	Chief Justices of the Supreme Court			
	John Jay		2,105.	
001	Comment of the contract of the			
	John Rutledge			60-
902	John Rutledge Earl Warren			656
002	John Rutledge			65

TABLE 11.—Medals produced by the Philadelphia Mint, fiscal years 1976-78—Continued

	Medals		r of medals pr	
List No.	Subject	Fiscal year 1976	Fiscal year 1977	Fiscal year 1978
	Miscellaneous			
	Time Increases His Fame			
	Cabinet Medal	763	581	25
	Washington and Jackson	856	122	1,03
	Commencement of Coin Cabinet		• • • • • • • • • • • • • • • • • • • •	11
	Presidency Relinquished			62
	Allegiance	2,012	119	3,07
	Washington and Lincoln	,		5,07
	Washington Wreath	1,093	432	99
	Washington Bicentennial			
	James Garfield			22
	Lincoln and Garfield			55
	Pennsylvania Bicentennial			43
	Valley Forge Centennial	297.		
	Lincoln and Grant	317.		1,03
616	Lincoln, Broken Column	1,036.		1,21
517 .	Japanese Embassy			
618	Frederick Rose			
	Louis Agassiz			
	Indian Peace Medal (George II)			
	David Hosack			65
	First Steam Coinage			
	Union Pacific Railroad	491	110	
	Emancipation Proclamation			
	Cyrus W. Field			
	Joseph Pancoast	165	118	16
	Indian Peace (Grant)		• • • • • • • • • • • • • • • • • • • •	
	Hayes, Indian Peace (oval)			
	Garfield, Indian Peace			
	Arthur, Indian Peace			
	Harrison, Indian Peace			
	Let Us Have Peace (Grant)			
	Seward-Robinson			
535	U.S. Diplomatic (July 4, 1776)	813.		
	Great Seal Centennial Medal, 1782–1882			
	Joseph Francis	126.		
	Lincoln Centennial			
539	Wright Brothers	418.		
	Abraham Lincoln			21
541	Woodrow Wilson	373.		
542	Warren G. Harding			
	Calvin Coolidge			
	Herbert Hoover			
	Charles A. Lindbergh			
	Franklin D. Roosevelt			
	Mount Vernon			
	Benjamin Franklin			
	Franklin D. Roosevelt			
	Harry S. Truman	1.50	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •
	Vice President Alben W. Barkley	152.		
	Dr. Jonas E. Salk			
	Dr. Robert H. Goddard			
	Dr. Thomas A. Dooley III			
	Sam Rayburn			
	U.S. Secret Service 100th Anniversary			
	Diplomatic Courier	300		٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠
	Transpo '72			
		2,393		
559	J. Edgar Hoover			
559 561 .	J. Edgar Hoover		4.170	
559 561 562	Brig. Gen. Charles Yeager			
559 561 562 563	Brig. Gen. Charles Yeager			59
659 661 662 663 702	Brig. Gen. Charles Yeager Marian Anderson Opening of New Mint at Phila. (Aug. 14, 1969)			59
559 561 562 563 702 707	Brig. Gen. Charles Yeager Marian Anderson Opening of New Mint at Phila. (Aug. 14, 1969) U.S. Treasury Building	115 322	864 444	59 21
559 561 562 563 702 707	Brig. Gen. Charles Yeager Marian Anderson Opening of New Mint at Phila. (Aug. 14, 1969)	115 322	864 444	59 21

¹ Footnotes at end of table.

TABLES 59

TABLE 11.—Medals produced by the Philadelphia Mint, fiscal years 1976-78—Continued

Medals		Number of medals produced		
List No.	Subject	Fiscal year 1976	Fiscal year 1977	Fiscal year 1978
	Bronze Miniature Presidential (15/16")			
801 George W	ashington	25,682.		
	ms			
	efferson			
	dison			• • • • • • • • • • • • • • • • • • • •
	nroe			
	cy Adamsackson	5,381.	6,253	2.125
	n Buren.			۷,1۷.
	enry Harrison			
	r			
	Polk	3,099.		
	aylor			
	llmore	· · · · · · · · · · · · · · · · · · ·		
	lierce	- ,		
	hananLincoln		• • • • • • • • • • • • • • • • • • • •	6.214
	phnson			0,21
	Grant			
	B. Hayes			
	Garfield.			
	. Arthur	8,721.		
322 Grover Cl	eveland	7,457		
	Harrison			
	CKinley			
	Roosevelt			
	. Taft	,		
	Wilson			
	Hardingolidge	,		
	oover	8,065	8.078	4,958
	D. Roosevelt			12,39
	Fruman			7,01
	. Eisenhower (1st term)	11,159.		
	ennedy	33,146.		
37 Lyndon B.	. Johnson (2d term)	9,331	5,288	
	I. Nixon	,	• • • • • • • • • • • • • • • • • • • •	
39 Richard M	I. Nixon (2d term)			
	Ford		22 252	
	rter Carter (Proof)			
Total	Bronze Miniature Presidential series	368,968	60,562	61,34
Go	old plated Miniature Presidential (15/16")			
301 George W	ashington	2,125	1,654	32:
	ns			6
	efferson	1,380	409	7'
04 James Mac	dison	504.		11
05 James Moi	nroe	530	158	21
	cy Adams			7
	ackson	781	382	23
	n Buren	409	157	16
	enry Harrison			
	T			
	Polk			14
	Saylorllmore			- ·
T VITTATO T				
	'ierce			
14 Franklin P	Pierce			12
14 Franklin P 15 James Buc	hanan		863	

TABLE 11.—Medals produced by the Philadelphia Mint, fiscal years 1976-78—Continued

Medals	Number of medals produced		
List Subject No.	Fiscal year 1976	Fiscal year 1977	Fiscal year 1978
Gold plated Miniature Presidential (15/16")—Continued			
818 Ulysses S. Grant	811.		
819 Rutherford B. Hayes	357.		17
320 James A. Garfield	683.		
321 Chester A. Arthur	813.		
22 Grover Cleveland	. 728.		
23 Benjamin Harrison	512.		
24 William McKinley	772.		
25 Theodore Roosevelt	984.		17
26 William H. Taft	833.		
27 Woodrow Wilson	420.		8
28 Warren G. Harding	676.		7:
29 Calvin Coolidge	687.		
30 Herbert Hoover	613.		
31 Franklin D. Roosevelt	1,226	881	75
32 Harry S. Truman	956	443	63
33 Dwight D. Eisenhower (1st term)	863	209	8-
35 John F. Kennedy	2,489	909	1,06
37 Lyndon B. Johnson (2d term)	755	471	
38 Richard M. Nixon	577	204	15:
39 Richard M. Nixon (2d term)	751.		
40 Gerald R. Ford			95
Total gold plated Miniature Presidential series	33,750	6,740	6,53
Miniature Miscellaneous (15/16")			
660 Transpo '72	4,985.		
701 Opening of New Mint at Phila. (Aug. 14, 1969)	8,294	10,279	1,24
01P Philadelphia Mint Bicentennial	1,895.		10,01
05 First Coinage	6,220.		2,083
06 White House	9,248.		20,16
08 New York Assay Office	7,246.		
09 U.S. Bullion Depository at West Point	7,314.		
10 U.S. Bullion Depository at Fort Knox			
13 U.S. Treasury Building	8,273.		
14 Opening of New Mint at Phila. (Aug. 14, 1969) 2	96,594	43,009	
50 New Orleans Mint ²	4,682.		
51 San Francisco Mint ²			
71 Georgetown Customhouse	6,783	2,390	
72 Boston Customhouse			
74 Wheeling Customhouse			
8	0.198.		
75 Savannah Customhouse			
75 Savannah Customhouse	6,414.		
 75 Savannah Customhouse 76 New Orleans Customhouse 77 Galveston Customhouse 	6,414. 3,494.		
 75 Savannah Customhouse 76 New Orleans Customhouse 77 Galveston Customhouse 78 New York Customhouse 	6,414. 3,494. 13,261.		
 75 Savannah Customhouse 76 New Orleans Customhouse 77 Galveston Customhouse 78 New York Customhouse 79 Galena Customhouse 	6,414. 3,494. 13,261. 3,184.		
75 Savannah Customhouse 76 New Orleans Customhouse 77 Galveston Customhouse 78 New York Customhouse 79 Galena Customhouse 80 Providence Customhouse	6,414. 3,494. 13,261. 3,184.		
75 Savannah Customhouse 76 New Orleans Customhouse 77 Galveston Customhouse 78 New York Customhouse 79 Galena Customhouse 80 Providence Customhouse	6,414. 3,494. 13,261. 3,184. 2,096.		2,194

¹Oval-shaped pewter medal.

² Medals are 1½ inches in diameter, rather than 1½ inches.

TABLE 12.—Medals produced by the Denver Mint, fiscal years 1976-78

	Medals	Number of medals produced			
List No.	Subject	Fiscal year 1976	Fiscal year 1977	Fiscal year 1978	
	Miniature Presidential (15/16")				
801 George Wash	ington	2,651	2,741	400	
		100	204	1,950	
	'son	2,603	3,600	2,36	
	n		2,100	2,67	
•			1,182	1,12	
	Adams	919	2,100	1,02.	
	on		1,893	1,04	
	Buren	62	2,394 .	.,	
	y Harrison		2,199	2.07	
				1,03	
w	k		2,400	98	
	or			2,34	
	ore		2,448	5(
	e	68	3,493	5(
	an		2,306	1,07	
	coln		3,714	4,67	
			577	2.07	
	Son				
	ant			1,11	
	Hayes				
	field				
	rthur			3,300	
	land				
	rison				
	inley		2,325	2,04	
	osevelt				
	aft				
	lson				
	arding			2,17	
329 Calvin Coolid	ge			2,23	
	er		- ,	• • • • • • • • • • • • • • • • • • • •	
	Loosevelt		3,110	2,01	
	man		3,069	25	
333 Dwight D. Ei	isenhower (1st term)				
34 Dwight D. Ei	isenhower (2d term)	3,488.		31:	
35 John F. Kenn	edy	7,917	3,742	3,890	
337 Lyndon B. Jo	hnson (2d term)	2,281	1,358.		
338 Richard M. N	lixon	200.		100	
39 Richard M. N	Tixon (2d term)				
340 Gerald R. Fo	rd	7,078	2,387	3,58	
841 Jimmy Carter			4,994	6,814	
·					
Total Mir	niature Presidential series	32,556	74,182	52,769	
Λ	Miniature Miscellaneous (15/16'')				
03 Denver Mint	Medal	187,624	r 131,643	155,024	
Grand tot	- al	220,180	r 205,825	207,79	

r Revised.

Table 13.—Medals produced by the San Francisco Assay Office, fiscal years 1976-78

	Medals	Number of medals produced		
List No.	Subject	Fiscal year 1976	Fiscal year 1977	Fiscal year 1978
	Miniature Miscellaneous			
773 San Francisc	s Assay Office San Francisco ¹ co Customhouse ¹	5,401		
	Johnson ¹			10,000
Total .		57,549		10,000

¹ Diameter 15/16 inches.

Table 14.—Medal produced by the Old San Francisco Mint, fiscal years 1976-78

	Medal	Number of medals produced			
List No.	Subject	Fiscal year 1976	Fiscal year 1977	Fiscal year 1978	
	Miniature Miscellaneous (1½")				
751 San Francisco Mint		74,584	41,945	36,332	

² Diameter 1½ inches.

TABLE 15.—Foreign coins manufactured by U.S. mints, fiscal year 1978

Country and denomination	Coins manufactured	Metallic composition	Gross	Diameter	Thickness	Type of edge
	Pieces		Grams	mm.	mm.	
Dominican Republic: 1 50 centavos	296,000 1,996,000 2,995,000 5,287,000	296,000 75 percent copper, 25 percent nickel 1,996,000do	12.50 5.00 3.00	30.60 21.20 19.05	2.20 1.90 1.70	Reeded. Smooth. Do.

'Manufactured at the Philadelphia Mint.

Table 16.—Gold transactions of the Bureau of the Mint, fiscal year 1978

[In fine ounces rounded to whole ounces] RECEIPTS AND DISBURSEMENTS OF GOLD BULLION

Institution	Balance on hand Sept. 30, 1977	Receipts (including transfers)	Total	Disbursements (including transfers)	Balance on hand Sept. 30, 1978
Philadelphia	718	1,016	1,734	949	785
San Francisco	3,340,077.		3,340,077		3,340,077
Denver	40,524,782	42	40,524,824	61	40,524,763
New York	74,950,555	1,445,038	76,395,593	1,210,018	75,185,575
Fort Knox	147,353,632 .		147,353,632	11,311	147,342,321
Total	266,169,764	1,446,096	267,615,860	1,222,339	266,393,521

DETAILED RECEIPTS OF GOLD BULLION

Institution	Deposits	Surplus bullion recoveries	Transfers from mints and assay offices	Total receipts
Philadelphia		1	1,015	1,016
Denver	1,432,731		42 12,307	42 1,445,038
	1,432,731	1	13,364	1,446,096

Institution	Fine bars issued to depositors	Sold in sweeps, operating losses, etc.	Sold	Transfers to mints and assay offices	Total disbursements
Philadelphia			• • • • • • • • • • • • • • • • • • • •	949	949
Denver				61	61
New York	4,810	1,577	² 1,202,588	1,043	1,210,018
Fort Knox		• • • • • • • • • • • • • • • • • • • •		11,311	11,311
Total	4,810	1,577	1,202,588	13,364	1,222,339

¹ Includes 1,427,922 fine troy ounces transferred from the U.S. Treasury gold account at the Bank of Canada, Ottawa.

² Sold at GSA auctions.

TABLES 65

TABLE 17.—Gold transactions of the Bureau of the Mint, fiscal year 1978, dollar value

[Valued at \$42.2222 per fine troy ounce]

RECEIPTS AND DISBURSEMENTS OF GOLD BULLION

Institution	Balance on hand Sept. 30, 1977	Receipts (including transfers)	Total	Disbursements (including transfers)	Balance on hand Sept. 30, 1978
Philadelphia San Francisco	\$30,332	\$42,879	\$73,211 141,025,413	\$40,080	\$33,131 141,025,413
Denver New York	1,711,045,414 3,164,577,320	1,811 61.012.708	1,711,047,225 3,225,590,028	2,572 51,089,647	1,711,044,653 3,174,500,381
Fort Knox		01,012,700	6,221,594,520	477,567	6,221,116,953
Total	11,238,272,999	61,057,398	11,299,330,397	51,609,866	11,247,720,531

DETAILED RECEIPTS OF GOLD BULLION

Institution	Deposits	Surplus bullion recoveries	Transfers from mints and assay offices	Total receipts
Philadelphia		\$23	\$42,856	\$42,879
Denver	1 \$60,493,094		1,811 519.614	1,811 61,012,708
Total	60,493,094	23	564,281	61,057,398

Institution	Fine bars issued to depositors	Sold in sweeps, operating losses, etc.	Sold	Transfers to mints and assay offices	Total disbursements
Philadelphia San Francisco				\$40,080	\$40,080
Denver				2,572	2,572
New York	\$203,068	\$66,592	² \$50,775,925	44,062	51,089,647
Fort Knox				477,567	477,567
Total	203,068	66,592	50,775,925	564,281	51,609,866

¹ Includes gold valued at \$60,290,026 transferred from the U.S. Treasury gold account at the Bank of Canada, Ottawa.

² Sold at GSA auctions.

TABLE 18.—Summary of silver receipts, issues, and balances of the Bureau of the Mint, fiscal years 1934-78

Item	Fine ounces	Value
Balances June 30, 1933:		
Silver bullion ordinary	13,831,051.05	\$6,588,389.06
Recoinage silver	13,925,846.32	19,251,049.27
	27,756,897.37	25,839,438.33
Receipts (July 1, 1933–Sept. 30, 1978):		- ,
Silver Purchase Act silver (act of June 19, 1934, 48		
Stat. 1178)	2,048,490,530.48	1,027,637,216.75
1934)	113,032,915.78	56,528,353.08
Foreign debt silver (title III, act of May 12, 1933, 48 Stat. 31, 53)	22,734,824.35	11,367,412.18
Newly-mined domestic silver:		
Executive Proclamation silver (E.P. 2067 of Dec.	201.00/.000.00	
21, 1933, and amendments)	301,226,723.50 206,287,208.67	216,588,371.53 146,693,123.94
Act of June 6, 1939 (53 Stat. 998)	376,686,164.80	340,919,995.60
-	884,200,096.97	704,201,491.07
City hullion and new		
Silver bullion ordinary	404,705,849.58 275,660,797.81	290,557,840.68 390,876,583.90
Recoinage bullion from uncurrent silver dollars	45,936,330.61	61,818,618.00
Seigniorage accruing from revaluation of silver		1,179,406,984.67
Silver bullion for coinage or for sale at \$1.29 +	163,844.32 514,685.65	211,839.12 687,154.59
Silver bullion from GSA stockpile (act of Dec.	314,003.03	007,134.37
31, 1970, 84 Stat. 1769)1	25,500,000.00	32,969,696.95
Total receipts	3,820,939,875.55	3,756,263,190.99
Total silver available fiscal years 1934		
through 1978	3,848,696,772.92	3,782,102,629.32
Issues (July 1, 1933–Sept. 30, 1978):		
Silver processed into U.S. coins	1,985,536,015.24	1,903,479,700.71
Mar. 11, 1941)	410,814,344.19	191,713,360.44
Silver sold:	, ,	, ,
Under Green Act (act of July 12, 1943, 57 Stat.	1/7 200 240 02	30 110 330 13
520)	167,380,240.92 138,971,143.85	78,110,778.17
Other	387,268,097.32	103,749,218.68 514,551,965.01
_	307,200,077.32	
Wasted in operation		868,618.78
Melting losses – uncurrent coin	553,386,662.70	9,535,449.86 715,516,281.00
Silver transferred to stockpile (act of June 24, 1967,		
81 Stat. 77) ²	165,000,000.00	213,333,333.18
	3,809,488,441.51	3,730,858,705.83
Total issues		
Total issues Balances Sept. 30, 1978:		
Balances Sept. 30, 1978: Silver bullion ordinary: Bureau of the Mint	23,006,520.73	30,469,336.11
Balances Sept. 30, 1978:	23,006,520.73 16,201,810.68	30,469,336.11 20,774,587.38
Balances Sept. 30, 1978: Silver bullion ordinary: Bureau of the Mint		

¹ For silver clad coin.

² Silver bullion of the Treasury in eustody of the Bureau of the Mint, amounting to 120,371,251.81 fine ounces valued at \$155,631,517.38 was transferred to the U.S. Government stockpile during the fiscal year 1968. In addition, silver bullion of the Treasury in custody of the Atomic Energy Commission, amounting to 44,628,748.19 fine ounces valued at \$57,701,815.80, was transferred to the stockpile during fiscal 1968, making total transfers of 165,000,000 fine ounces valued at \$213,333,333.18. (Strategic and Critical Materials Stockpiling Aet, Public Law 520, approved July 23, 1946, 60 Stat. 596, 50 U.S.C. 98, 98a-g (1951); Public Law 90-29, approved June 24, 1967, 81 Stat. 77, 31 U.S.C. 405a-1, a-2, a-3 (supp. 1967),

Table 19.—Silver bullion transactions of the Bureau of the Mint, fiscal year 1978

Balances on hand Sept. 30, 1977:	Fine troy ounces
Silver bullion ordinary	23,128,624.00
Silver bullion for coinage	8,325,698.34
Coinage metal fund silver	7,946,739.42
Total	39,401,061.76
Increases during the fiscal year:	
At market value	206.24
Deposits in exchange for bars	2,500,353.76
All other	12,195.03
Total increases	2,502,755.03
Decreases during the fiscal year:	
Sold	124,141.18
Manufactured into U.S. silver-clad coin	70,979.76
Bars issued in exchange for deposits	2,500,353.76
All other	10.68
Total decreases	2,695,485.38
Balances on hand Sept. 30, 1978:	
Silver bullion ordinary	23,006,520.73
Silver bullion for coinage	8,325,698.34
Coinage metal fund silver	7,876,112.34
Total	39,208,331.41

¹ Includes 363.36 ounces of silver from melted coin sets.

TABLE 20.—Monetary metals operated on and operating gains and losses of the mints and assay offices, 19781

Total		6,746,882.319	1,992.549	7,968,417.98	59,458.32	1,738,989.65	12,353,727.00	39,547,202.00 26,192,912.00	27,381,036.00 17,706,276.00 26,385,571.00	37,347,323.00 128,497,580.00 38,068,720.00	20,985,595.00
New York Assay Office and West Point Depository		6,746,882.319		7,968,417.98				102,431.00	6,337,139.00	10,508,597.00	
Denver Mint						1,738,953.70		13,208,215.00	6,337,139.00	54,754,241.00	20,985,595.00.
San Francisco Assay Office			1,992.549.		59,458.32	1,738,953.70		1,894,118.00	195,648.00	2,604,595.00	
Philadelphia Mint			1,992.549		59,458.32	35.95	12,353,727.00	24,342,438.00 26,192,912.00	27,381,036.00 11,173,489.00 26,385,571.00	37,347,323.00 60,630,147.00 38,068,720.00	20,985,595.00
Operating division and unit of quantity	METALS OPERATED ON	fine troy ounces	Coining (medals)do	Melting and refiningdo	Coining (medals)do	dodo	avoirdupois pounds	opop	oy: refiningdododo	ind refining do	op
Operating divisio	METALS	Gold bullion: Melting and refining	Coining (medals)	Melting and refining	Coining (medals)	Coining and remining	:		Cupronickel alloy: Melting and refining Coining Strip	Melting and refining Coining Strip	Melting and refining (alloy) Coining

-1,602.682	.562	1,806.57	24.79	1,675.55	-69,333.00 -87,406.00	-211,146.00 -37,166.00 -222.00	-340,201.00 -125,421.00 -18,638.00	23,373.00	3,230.00
-1,602.682		1,806.57			148.00		21,860.00		
	001	-	2.75		-7,072.00	-1,524.00	-8,228.00		
				1,675.57	6,688.00	-1,020.00	5,841.00		
	.563		22.04.	02	-69,333.00	-211,146.00 -34,622.00 -222.00	-340,201.00 -144,894.00 -18,638.00	23,373.00.	3,230.00
fine troy ounces	op	ob ob	op	gross ounces	avoirdupois pounds do	op op op	op	op	Op
Gold bullion: Melting and refining Cash and deposits	Coining (medals)	Melting and refining	Coining (medals)	Melting and refining Coining	Melting and refining Coining Strip	Cupronickel alloy: Melting and refining Coining Strip Strip Bronze alloy:	Melting and refining Coining Strip	Melting and refining	Surp

²Gains and losses as determined by inventories on dates indicated in footnote 1 ¹This table is based on the Annual Settlements, which were performed at the Denver Mint and the New York Assay Office as of June 30, 1978, at the Philadelphia Mint, as of July 21, 1978, and at the San Francisco Assay Office, as of Dec. 31, 1978

Note.—This table does not include operations on comage metals processed for foreign governments.

TABLE 21.—Refined gold and silver produced by the electrolytic process at the New York Assay Office, fiscal year 1978, by months

Month	Gold	Silver
1977	Fine troy ounces	Fine troy ounces
October		350,615.74
November		359,548.74
December	100 000 505	404,803.88
1978		
January		302,239.57
February	005 500 (05	340,435.64
March		339,030.14
April		270,857.17
May	100 005 145	151,943.76
une	33,085.704	64,192.29
uly		143,850.55
AugustSeptember		530,042.62
Total fine ounces		3,257,560.10
Fonnage (short tons)	69.97	111.69

TABLE 22.—Stocks of unrefined and semiprocessed gold and silver bullion held at the mints and assay offices, Sept. 30, 1978

Institution	Gold	bullion	Silver	bullion
-	Unrefined	Semiprocessed	Unrefined	Semiprocessed
Philadelphia	Fine troy ounces	Fine troy ounces	Fine troy ounces	Fine troy ounces
San Francisco	12.198		354.88	
Denver	75.585			
New York	14,176,922.500	16,505,658.007	6,968,778.56	4,546,519.64
Total	14,177,397.193	6,505,658.007	6,969,993.51	4,546,519.64
Tonnage (short tons)	486.08	223.05	238.97	155.88

¹ Represents gold anodes used in refining process.

TABLE 23.—Detail of revenues deposited into the general fund of the Treasury by the Bureau of the Mint, fiscal year 1978

Total	\$70,235,149.30 296,884,894.23 36,216.72 1.80 40,642,531.05 6,381,787.45	1,438.27
New York Assay Office ' Fort Knox and Depository West Point Depository ²	3,698,364.46	
Denver Mint	\$28,054,877.66 116,654,374.97	
San Francisco Old Assay Office ¹ Mint	\$312,331.53	\$1,426.27. 21,523.26.
Philadelphia Mint	\$34,727,862.05 211,929,564.99 1.80	12.00
Office of the Director	(\$40,642,531.05) 40,642,531.05 5,720,911.77	
Item	Seigniorage, minor coinage Seigniorage, cupronickel clad coinage Seigniorage, silver clad coinage Gifts to the United States, not otherwise classified Rent of equipment and other personal property Recovery of Mint manufacturing expenses Sale of miscellaneous products and byproducts Fees and other charges for	auditing services

TABLE 23.—Detail of revenues deposited into the general fund of the Treasury by the Bureau of the Mint, fiscal year 1978—Continued

Item	Office of the	Philadelphia	San Francisco	Old	Denver Mint	New York Assay Office	Fort Knox	Total
	Director	Mint	Assay Office 1	Mint		west Point Depository ²	Depository	
GENERAL ACCOUNT RECEIPTS								
Fees and other charges								
Commissions on telephone				•		•		
pay stations		\$832.67	\$596.88	\$209.42	\$120.83			\$1,759.80
•				•		\$12,626.00.	•	12,626.00
•					492.32	•	•	492.32
Fees and other changes for special benefits								
not otherwise classified						219.20		219 20
Bullion charges		53.38			524.00	1,		1,861.06
Other fees and charges								
for miscellaneous services		195.00			113.12	1,795.00.	•	2,103.12
rroceeds from sale of								
personal property,								
not otherwise classified		7,653.78	150,564.64		31,012.40.		•	189,230.82
Sale of scrap and salvage								
:			5,941.22					5,966.22
Sale of recvolable			0,124.43	217.93	3,039.10			10,031.48
office wastepaper			1,577.95	69.99		192.00		1,836.64
Profit on sale of gold						07.		.70
property lost or damaged	•	21.50		•	1.00			22.50
Miscellaneous recoveries and								
relunds, not otherwise classified		1 731 96			22 52	1 101 10		7 855 58
				•	7		• • • • • • • • • • • • • • • • • • • •	2,000
Total general account receipts	\$5,720,911.77	246,921,385.02	5,758,474.23	23,438.59	144,814,233.90		11.194.124.01	414.432.567.52

¹ Coinage operations authorized by sec. 201 of Public Law 89-91, approved July 23, 1965, a result of which is the receipt of coinage seigniorage shown in this columg, ²Coinage operations are also conducted at the West Point Bullion Depository, a result of which is the receipt of coinage seigniorage shown in this column.

TABLE 24.—Analysis of monetary assets and liabilities of the Bureau of the Mint, Sept. 30, 1978

Item	Philadelphia Mint	San Francisco Assay Office	Denver Mint	New York Assay Office and West Point Depository	Fort Knox Depository	Total
ASSETS						
Gold bullion	\$93,942.74 132,259.57 32,447,733.00 82,088,424.55	\$141,025,413.41 463.52 3,883,854.00 13,614,275.90	\$1,711,044,652.40 135,295.22 2,120,554.00. 63,400,874.85	\$3,174,513,749.02 141,088,413.06 45,432,000.00	\$6,221,116,953.54	\$11,247,794,711.11 41,356,431.37 38,452,141.00 204,535,575.30
Coinage metal other than silver.	217,571,312.31 7,750.64	16,670,164.10	-14,782,945.33 -14,782,945.33 35,172.03	660,422.58 907,225.65		220,118,953.66 1,112,382.68
Total assets	346,589,159.29	176,171,576.67	1,778,490,706.75	3,268,538,810.31	6,221,116,953.54	11,790,907,206.56
LIABILITIES						
Bullion fund	129,017,779.12 217,443,948.57 127,431.60	157,365,668.43 16,670,164.10 2,135,744.14	1,793,151,163.91 -14,908,883.45 248,426.29	3,267,878,387.73 609,420.36 51,002.22	6,221,116,953.54	11,568,529,952.73 219,814,649.58 2,562,604.25
Total liabilities	346,589,159.29	176,171,576.67	1,778,490,706.75	3,268,538,810.31	6,221,116,953.54	11,790,907,206.56

¹ Includes silver bullion for coinage valued at \$10,764,539,26.

TABLE 25.—Number of employees of the Bureau of the Mint, fiscal year 1978

		Total Sept. 30,	1771	700	250	115	461	56	55		2 575
		Total Sept. 30,		642	960	9 5	464 335	55	30 142		2,455
17/0		Fort Knox Depository		28			3				31
Just 1970 Justal year 1970		West Point Depository		26 28		2	10		1 m		4 4 7
7,11,11,1	;	New York Assay Office		4 :	63	47	18	10	13		195 215
		Old Mint		134	:	135	50		11	1 2	251
•	Con Propies	Assay Office	10	63		22 283	46	6	84	557	624
1		Denver Mint	7.1	183	. 7	4 4	75	6	24	382	379
		Philadelphia Mint	92	322	7 71	42	160 55	20	43	752	774
	Office	of the Director 1	169							169	176
		Functions	General Administration ²	Coining	Cash and Deposits.	Numismatic Services	Engraving	Assaying		Total Sept. 30, 1978	Total Sept. 30, 1977

²Includes executive direction, accounting, personnel, protection, production, technical, etc. ¹ The Office of the Director was composed of six divisions: Administration; Management Planning; Marketing and Statistical Services; Production; Technology and Personnel. In addition, there were five special stafis: Legal, Internal Audit, Security, Public Affairs, and Equal Employment Opportunity.

Table 26.—U.S. coins manufactured, calendar year 1977

[For specifications, metallic composition, and designs, see table 4]

1. SUMMARY

	General ci	rculation	Numis	matic 1	Total c	oinage
Denomination	Number of pieces	Face value	Number of pieces	Face value	Number of pieces	Face value
l dollar:						
Cupronickel	45,579,006	\$45,579,006.00	3,251,152	\$3,251,152.00	48,830,158	\$48,830,158.00
Silver clad			219,402	219,402.00	219,402	219,402.00
50 cents:						
Cupronickel	75,047,106	37,523,553.00	3,251,152	1,625,576.00	78,298,258	39,149,129.00
Silver clad			219,402	109,701.00	219,402	109,701.00
25 cents:						
Cupronickel	² 725,080,978	181,270,244.50	3,251,152	812,788.00	728,332,130	182,083,032.50
Silver clad			219,402	54,850.50	219,402	54,850.50
10 cents	1,173,537,228	117,353,722.80	3,251,152	325,115.20	1,176,788,380	117,678,838.00
5 cents	882,689,472	44,134,473.60	3,251,152	162,557.60	885,940,624	44,297,031.20
1 cent	³ 8,618.992,300	86,189,923.00	3,251,152	32,511.52	8,622,243,452	86,222,434.52
Total	11,520,926,090	512,050,922.90	20,165,118	6,593,653.82	11,541,091,208	518,644,576.72

II. NUMBER AND FACE VALUE OF COINS PRODUCED, PHILADELPHIA AND DENVER MINTS

	Philadelph	nia Mint	Denve	r Mint	Total c	oinage
Denomination	Number of pieces	Face value	Number of pieces	Face value	Number of pieces	Face value
1 dollar:						
Cupronickel	12,596,000	\$12,596,000.00	32,983,006	\$32,983,006.00	45,579,006	\$45,579,006.00
50 cents	43,598,000	21,799,000.00	31,449,106	15,724,553.00	75,047,106	37,523,553.00
25 cents	461,204,000	115,301,000.00	256,524,978	64,131,244.50	717,728,978	179,432,244.50
10 cents	796,930,000	79,693,000.00	376,607,228	37,660,722.80	1,173,537,228	117,353,722.80
5 cents	585,376,000	29,268,800.00	297,313,472	14,865,673.60	882,689,472	44,134,473.60
1 cent	3,074,575,000	30,745,750.00	4,149,062,300	41,490,623.00	7,223,637,300	72,236,373.00
Total	4,974,279,000	289,403,550.00	5,143,940,090	206,855,822.90	10,118,219,090	496,259,372.90

¹ All numismatic coins were manufactured at the U.S. Assay Office, San Francisco, and included 3,251,152 1977 proof sets, 148,608 40-percent silver-clad Bicentennial proof sets, and 70,794 40-percent silver-clad Bicentennial uncirculated sets.

NOTE.—The manufacture of Bicentennial coins was discontinued on Dec. 31, 1976, however, silver-clad sets continued to be packaged and sold after that date. Such coins reported in this table constitute those sets sold during 1977.

² Includes 7,352,000 quarters manufactured at the U.S. Bullion Depository at West Point.

^a Includes 1,395,355,000 1-cent coins manufactured at the U.S. Bullion Depository at West Point.

⁴ For general circulation.

Table 27.—Consumption of metals in the manufacture of U.S. coins, calendar year 1977

[Based on standard weight of individual coins. See table 4]

		Meta	allic content—sho	ort tons	
Denomination	Silver	Copper	Nickel	Zinc	Total
Dollars:			0.4.00		
Regular issue	• • • • • • • • •	1,044.57	94.92		1,139.49
Cupronickel		74.51 3.57	6.77		81.28 5.95
Total	2.38	1,122.65	101.69		1,226.72
Half dollars: Regular issue		859.96	78.14		938.10
Cupronickel		37.25 1.67	3.39		40.64 2.78
Total	1.11	898.88	81.53		981.52
Quarter dollars: Regular issue		4,154.33	377.50		4,531.83
Cupronickel	.56	18.63 .83	1.69		20.32 1.39
Total	.56	4,173.79	379.19		4,553.54
Dimes:					
Regular issue		2,689.50 7.45			2,933.89 8.13
Total		2,696.95	245.07		2,942.02
5-cent pieces: Regular issue		3,648.74 13.44			4,864.99 17.92
Total		3,662.18			4,882.91
1-cent pieces:					
Regular issue Proof coins				1,477.38 .56	29,547.52 11.15
Total		28,080.73		1,477.94	29,558.67
Summary: Regular issue Numismatic:		40,467.24	2,011.20	1,477.38	43,955.82
Cupronickel		130.39	11.85		142.24 10.12
Proof coins		31.48	5.16	.56	37.20
Grand total	4.05	40,635.18	2,028.21	1,477.94	44,145.38

TABLE 28.—Foreign coins manufactured by U.S. mints, calendar year 1977

						Tune
Country and denomination	Coins	Metallic composition	Gross	Diameter Thickness	Thickness	of edge
	Pieces		Grams	mm.	mm.	
Panama: 1 Centesimo	10,000,000 95	10,000,000 95 percent copper, 5 percent zinc	3.11	19.05		1.63 Smooth.
Peru:	2,100,000 70	2,100,000 70 percent copper, 30 percent zinc	3.20	21.00		1.35 Smooth.
Philippines: 2	1,088,000 60	1,088,000 60 percent copper, 40 percent zinc	2.50	(e)	1.31	1.31 Smooth.
Grand total						
West Point.	pository. West Point.	3 8 scallops: Outside scallops measuring 19 mm. and inside scallops measuring 17 mm.	uring 19 mm. a	and inside scall	lops measuring	17 mm.

Manufactured at the U.S. Bullion Depository, West Point. Manufactured at the Philadelphia Mint.

TABLE 29.—Summary of foreign coinage by the U.S. mints, by country, through Dec. 31, 1977

Country	Number of pieces produced	Country	Number of pieces produced
Argentina (blanks)		Honduras	115,929,500
Australia		Indo-China	135,270,000
Belgian Congo		Israel	91,000
Belgium		Korea	295,000,000
Bolivia		Liberia	56,744,679
Brazil (blanks)		Mexico	91,076,840
Canada		Mexico (blanks)	175,714,411
China		Nepal	195,608
China, Republic of (Taiwan)		Netherlands	562,500,000
Colombia		Neth. E. Indies	1,716,368,000
Costa Rica	131,798,820	Nicaragua	26,080,000
Cuba	496,559,888	Panama (Republic)	152,838,428
Curacao		Peru	761,067,479
Dominican Republic		Philippines	3,483,718,169
Ecuador	214,451,060	Poland	6,000,000
El Salvador		Saudi Arabia	124,712,574
Ethiopia	375,433,730	Siam (Thailand)	20,000,000
Fiji	4,800,000	Surinam (Netherlands Guiana)	21,195,000
France		Syria	7,350,000
Greenland		Venezuela	306,762,944
Guatemala	7,835,000		
Haiti	88,324,000 1,950,000	,	11,127,314,256

¹ Coined prior to Aug. 21, 1959, when Hawaii became the 50th State of the Union.

TABLES 79

Table 30.—Summary of foreign coinage by the U.S. mints, by calendar year, through Dec. 31, 1977

Calendar year	Number of pieces produced	Calendar year	Number of pieces produced
July 1, 1875-Dec. 31, 1905	155,896,973	1941	208,603,500
1906	10,204,504		307,737,000
1907	45,253,047	1943	186,682,008
1908	29,645,359	1944	788,498,000
1909	11,298,981	1945	1,802,376,004
1910	7,153,818	1946	504,528,000
1911	7,794,406	1947	277,376,094
1912	6,244,348	1948	21,950,000
1913	7,309,258	1949	156,687,940
1914	17,335,005	1950	2,000,000
1915	55,485,190	1951	25,450,000
1916	37,441,328	1952	45,857,000
1917	25,208,497	1953	193,673,000
1918	60,102,000	1954	19,015,000
1919	100,269,195	1955	67,550,000
1920	99,002,334	1956	38,793,500
1921	55,094,352	1957	59,264,000
1922	7,863,030	1958	152,575,000
1923	4,369,000		129,647,000
1924	12,663,196	1960	238,400,000
1925	13,461,000		148,500,000
1926	14,987,000	1962	256,485,000
1927	3,650,000	1963	293,515,000
1928	16,701,000	1964	
1929		1965	
1930	3,300,120	1966	7,440,000
1931	4,498,020	1967	176,196,206
1932	9,756,096	1968	416,088,658
1933	15,240,000	1969	348,653,046
1934	24,280,000		483,988,392
1935	109,600,850		207,959,692
1936	32,350,000		392,723,895
1937	26,800,000		295,408,674
1938	48,579,644		373,293,733
1939	15,725,000		762,126,363
1940.	33,170,000		562,372,000
	, ,	1977	13,188,000
		Total	11,127,314,256

NOTE.—For details of foreign coins produced by U.S. mints, 1876-1976, see separate Mint report, "Domestic and Foreign Coins Manufactured by Mints of the United States 1793-1976," pages 85-122. For calendar year 1976 data, see table 28, 1977 annual report; for 1977 data, see table 28 of this report.

TABLE 31.—Gold transactions of the Bureau of the Mint, calendar year 1977

[In fine ounces rounded to whole ounces]

RECEIPTS AND DISBURSEMENTS OF GOLD BULLION

Institution	Balance on hand Dec. 31, 1976	Receipts (including transfers)	Total	Disbursements (including transfers)	Balance on hand Dec. 31, 1977
Philadelphia	754	2,029	2,783	1,049	1,734
San Francisco	3,340,077.		3,340,077		3,340,077
Denver	40,524,763	68	40,524,831	85	40,524,746
New York	74,952,587	15,736	74,968,323	7,467	74,960,856
Fort Knox	147,353,671 .	• • • • • • • • • • • • • • • • • • • •	147,353,671	11,320	147,342,351
Total	266,171,852	17,833	266,189,685	19,921	266,169,764

DETAILED RECEIPTS OF GOLD BULLION

Institution	Deposits	Surplus bullion recoveries	Transfers from mints and assay offices	Total receipts
Philadelphia			2,029	2,029
Denver		1	67	68
New York Fort Knox	· ·	33	11,369	15,736
Total	4,334	34	13,465	17,833

Institution	Fine bars issued to depositors	Sold in sweeps, operating losses, etc.	Sold	Transfers to mints and assay offices	Total disbursements
Philadelphia					1,050
Denver New York	4,334	1,072		85 2,060 11,320	85 7,466 11,320
Total	4,334	1,072	1,050	13,465	19,921

¹ Consists of 36 ounces of gold sold in ARBA medals, 507 ounces sold to Engelhard, and 507 ounces sold to Handy & Harman.

TABLES 81

Table 32.—Gold transactions of the Bureau of the Mint, calendar year 1977, dollar value

[Valued at \$42.2222 per fine troy ounce]

RECEIPTS AND DISBURSEMENTS OF GOLD BULLION

Institution	Balance on hand Dec. 31, 1976	Receipts (including transfers)	Total	Disbursements (including transfers)	Balance on hand Dec. 31, 1977
Philadelphia	\$31,844	\$85,670	\$117,514	\$44,326	\$73,188
San Francisco	141,025,413.		141,025,413		141,025,413
Denver:	1,711,044,650	2,860	1,711,047,510	3,590	1,711,043,920
New York	3,164,663,084	664,427	3,165,327,521	315,269	3,165,012,252
Fort Knox	6,221,596,171 .		6,221,596,171	477,944	6,221,118,227
Total	11,238,361,172	752,957	11,239,114,129	841,129	11,238,273,000

DETAILED RECEIPTS OF GOLD BULLION

Institution Deposits		Surplus bullion recoveries	Transfers from mints and assay offices	Total receipts	
Philadelphia		\$3	\$85,667	\$85,670	
Denver		27	2,833	2,860	
New York		1,373	480,040	664,427	
Total:	183,014	1,403	568,540	752,957	

Institution	Fine bars issued to depositors	Sold in sweeps, operating losses, etc.	Sold	Transfers to mints and assay offices	Total disbursements
Philadelphia					\$44,326
Denver				\$3,590	3,590
New York	\$183,014	\$45,249		87,006	315,269
Fort Knox				477,944	477,944
Total	183,014	45,249	44,326	568,540	841,129

¹ Consists of gold valued at \$1,514 sold in ARBA medals, gold valued at \$21,406 sold to Engelhard, and gold valued at \$21,406 sold to Handy & Harman.

Table 33.—Silver bullion transactions of the Bureau of the Mint, calendar year 1977

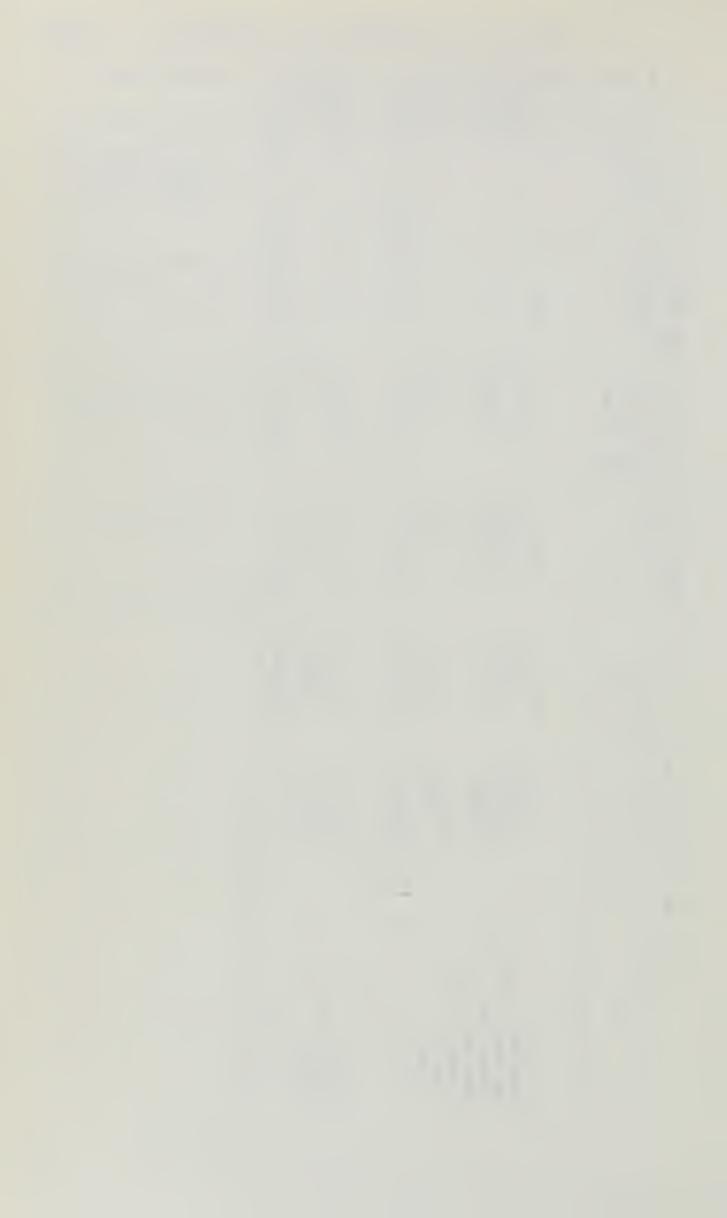
Balance on hand Dec. 31, 1976:	Fine troy ounces
Silver bullion ordinary	23,304,683.96
Silver bullion for coinage	8,325,698.34
Coinage metal fund silver	8,076,555.23
Total	39,706,937.53
Increases during the calendar year:	
At market value	299.83
Deposits in exchange for bars	2,483,930.92
All other	19,195.07
Total increases	2,493,425.82
Decreases during the calendar year:	
Sold	265,502.92
Manufactured into U.S. silver clad coin	90,858.52
Bars issued in exchange for deposits	2,483,930.92
All other	13.31
Total decreases	2,840,305.67
Balance on hand Dec. 31, 1977:	
Silver bullion ordinary	23,128,624.00
Silver bullion for coinage	8,325,698.34
Coinage metal fund silver	7,905,735.34
Total	39,360,057.68

¹ Includes 4,958.77 ounces of silver from melted coin sets.

TABLE 34.—Analysis of monetary assets and liabilities of the Bureau of the Mint, Dec. 31, 1977

Iten	Philadelphia Mint	San Francisco Assay Office	Denver Mint	New York Assay Office and West Point Depository	Fort Knox Depository	Total
ASSETS						
Gold bullion. Silver bullion. Cupronickel clad dollar coin Subsidiary coin.	\$133,999.20 211,801.26 36,435,831.00 98,450,042.65 15,076,041.35	\$141,025,413.41 463.52 9,348,350.00 12,578,387.60 3,821,565.36	\$1,711,043,919.85 135,305.44 9,539,000.00 96,595,000.00 21,740,300.00	\$3,165,025,619.65 '41,169,770.83 58,732,000.00 8,069,000.00	\$6,221,118,226.84	\$11,238,347,178.95 41,517,341.05 55,323,181.00 266,355,430.25 48,706,906.71
Coinage metal other than silverAll other	223,620,289.66 17,855.62	15,963,227.87 286,441.86	-13,562,978.29 37,588.62	87,547.42 1,270,724.31		226,108,086.66
Total assets	373,945,860.74	183,023,849.62	1,825,528,135.62	3,274,354,662.21	6,221,118,226.84	11,877,970,735.03
LIABILITIES						
Bullion fund	146,731,672.54 223,529,184.28 3,685,003.92	166,252,412.22 15,963,227.87 808,209.53	1,837,324,092.98 -13,440,476.34 1,644,518.98	3,274,267,058.53 66,951.04 20,652.64	6,221,118,226.84	11,645,693,463.11 226,118,886.85 6,158,385.07
Total liabilities	373,945,860.74	183,023,849.62	1,825,528,135.62	3,274,354,662.21	6,221,118,226.84	11,877,970,735.03

¹ Includes silver bullion for coinage valued at \$10,764,539,26.



U.S. GOLD, SILVER, AND COINAGE
METALS: Production and Market Prices

U.S. Mine Production of Gold and Silver, 1978

Mines in the United States produced 965,084 fine troy ounces of recoverable domestic gold and 38,570,628 fine troy ounces of recoverable domestic silver during 1978. The Bureau of Mines, which is the source of detailed and widely used gold and silver industry information, has provided the data that follows.

Mine production of recoverable gold in the United States, by States, calendar years 1974-78

[Content of ores]

State	1974	1975	1976	1977	1978p
	Fine ounces				
Alaska	9,146	14,980	22,887	18,962	13,555
Arizona	90,586	85,790	102,062	90,167	93,021
California	5,049	9,606	10,392	5,704	4,259
Colorado	52,083	55,483	50,764	72,668	31,071
Idaho	2,898	2,529	2,755	12,894	20,344
Montana	28,268	17,259	24,075	22,348	19,469
Nevada	298,754	332,814	287,962	324,003	237,889
New Mexico	15,427	15,049	15,198	13,560	9,921
Oregon	(1)	(1)	28	675	(1)
South Dakota	343,723	304,935	318,511	304,846	285,512
Tennessee	18	(1)	(1)	13	(1)
Utah	254,909	189,620	187,318	210,501	234,604
Washington	(1)	(1)	(1)	24,006	(1)
Other States	26,025	24,187	` '		15,439
Total	1,126,886	1,052,252	1,048,037	1,100,347	965,084

¹ Production combined to avoid disclosing individual company confidential data is included with "Other States." Preliminary.

SOURCE.—Bureau of Mines, U. S. Department of the Interior.

Mine production of recoverable silver in the United States, by States, calendar years 1974-78

[Content of ores]

State	1974	1975	1976	1977	1978p
	Fine ounces				
Alaska	547	(1)	3,265	1,725	1,993
Arizona	6,355,528	6,285,854	7,615,112	6,828,145	6,470,836
California	41,894	79,757	57,265	57,891	58,138
Colorado	2,783,978	3,366,000	4,083,171	4,663,496	4,021,348
Idaho	12,435,701	13,868,133	11,561,421	15,291,964	18,356,049
Maine	(1)	(1)	(1)		
Michigan	642,944	632,336	310,837	335,479	(1)
Missouri	2,387,250	2,525,042	2,277,013	2,362,752	2,090,429
Montana	3,512,161	2,616,626	3,278,629	3,367,442	2,930,277
Nevada	872,243	1,608,735	783,892	738,402	376,770
New Mexico	1,194,800	792,050	891,932	918,155	901,860
New York	64,463	56,047	49,199	56,353	(1)
Oregon	8,925	(1)		7,134	(1)
South Dakota	62,474	67,669	58,117	68,717	53,099
Tennessee	20,053	53,752	77,890	60,246	45,864
Utah	3,207,923	2,821,730	3,134,021	3,283,323	2,827,071
Washington	(1)	(1)	(1)	120,582	(1)
Other States	170,990	163,851	146,466	3,897	436,894
Total	33,761,874	34,937,582	34,328,230	38,165,703	38,570,628

¹ Production combined to avoid disclosing individual company confidential data and included with "Other States." Preliminary.

SOURCE.—Bureau of Mines, U.S. Department of the Interior.

Gold and Silver Issued for Nonmonetary Use

During the last 4 calendar years it is estimated that the following amounts of gold and silver were consumed for industrial, professional, and artistic purposes in the United States.

Gold and silver issued for industrial, professional, and artistic use in the United States

Calendar year	Gold 1	Silver ²
	Fine ounces	Fine ounces
1975	3,993,000	157,700,000
1976	4,648,000	170,500,000
1977	4,859,000	r153,600,000
1978	P4,800,000	P159,500,000

¹ Bureau of Mines, U.S. Department of the Interior.

Prices of Gold, Silver, and Coinage Metals

Gold

The monetary value of gold in the United States has been \$42.22 per fine troy ounce since October 18, 1973, when, pursuant to the amendments to Par Value Modification Act of September 21, 1973, it was changed from \$38 per fine troy ounce. The gold content of the dollar is 12.63157895 grains of gold 9/10 fine or "0.828948 Special Drawing Right or, the equivalent in terms of gold of 42²/₉ dollars per fine troy ounce of gold." The following table shows the monetary value of gold from the establishment of the U.S. monetary system under the Constitution in 1792. Daily price quotations for newly mined domestic gold from September 8, 1933, through January 1934 are also presented.

Monetary value of gold in the United States since establishment of the monetary system under the Constitution in 1792

Legislative reference	Number of grains of standard gold in 1 dollar	Fineness (thou- sandths)	Number of grains of pure gold in 1 dollar	Value of 1 fine troy ounce of gold (480 grains)
Act of Apr. 2, 1792	27	9163	24.75	\$19.39393939
Act of June 28, 1834		899.225	23.2	20.68965517
Act of Jan. 18, 1837	25.8	900	23.22	20.67183462
Act of Feb. 12, 1873	25.8	900	23.22	20.67183462
Act of Mar. 14, 1900	25.8	900	23.22	20.67183462
Proclamation of Jan. 31, 1934, issued pursuant				
to act of May 12, 1933, and Gold	155/21			
Reserve Act of Jan. 30, 1934	(15.23809524)	900	13.71428572	35.00
Act of Mar. 31, 1972 (effective May 8, 1972) Act of Sept. 21, 1973 (effective Oct. 18,		900	12.63157895	38.00
1973)	12.63157895	900	11.36842105	42.222222

² Estimate of Handy & Harman.

Revised.

PPreliminary.

Daily price quotations for newly mined domestic gold in the United States from Sept. 8, 1933, to Jan. 31, 1934¹

[Per fine ounce]

Day of month	Sept.	Oct.	Nov.	Dec.	Jan.	Day of month	Sept.	Oct.	Nov.	Dec.	Jan.
1			\$32.26	\$34.01		17		\$29.86	\$33.56		\$34.45
2		\$31.88	32.36	34.01	\$34.06	18	\$31.44	30.33	33.56	\$34.06	34.45
3		32.12	32.57		34.06	19	31.64	29.18		34.06	34.45
4		31.79	32.67	34.01	34.06	20	32.28	29.13	33.66	34.06	34.45
5		31.55		34.01	34.06	21	31.33	29.01	33.76	34.06.	
6		31.72	32.84	34.01	34.06	22	31.75.		33.76	34.06	34.45
7		31.20		34.01		23	31.86	29.59	33.76	34.06	34.45
8	\$29.62		33.05	34.01	34.06	24		29.80	33.76		34.45
9	29.12	31.14	33.15	34.01	34.06	25	31.30	31.36	33.76		34.45
10		31.26	33.20		34.06	26	31.49	31.54.		34.06	34.45
11	29.10	30.91	33.32	34.01	34.06	27	31.35	31.76	33.76	34.06	34.45
12	29.21			34.01	34.06	28	31.05	31.82	33.85	34.06.	
13	29.48	30.62	33.45	34.01	34.06	29	31.33.		33.93	34.06	34.45
14	29.77	29.83	33.56	34.01		30	31.46	31.96.		34.06	34.45
15	30.41.		33.56	34.01	34.06	31		32.12.			34.45
16	30.49	29.00	33.56	34.01	34.45						

¹ Prices shown from Sept. 8 through Oct. 24, 1933, represent the price at which the Secretary of the Treasury was authorized to sell newly mined domestic gold received on consignment under authority of Executive order of Aug. 29, 1933. Quotations from Oct. 25, 1933, through Jan. 15, 1934, represent the price fixed for newly mined domestic gold by the Reconstruction Finance Corporation in consultation with the Secretary of the Treasury and the President, which was offered in payment for notes of the Reconstruction Finance Corporation, under authority of Executive order of Oct. 25, 1933. (This order revoked the Executive order of Aug. 29.) Quotations from Jan. 15, to Jan. 31, 1934, represent the price at which the Federal Reserve Bank of New York as fiscal agent purchased newly mined domestic gold consigned to the mints and assay offices. Payment for this gold when coined was made by the Treasury with a special issue of Treasury bonds, series of Apr. 16, 1934. Under regulations issued by the Treasury Department Jan. 31, 1934, the mints are authorized to purchase newly mined domestic gold, unmelted scrap gold, and gold imported into the United States after Jan. 30, 1934, at \$35 less one-fourth of 1 percent and less mint charges.

SOURCE.—"Annual Report of the Secretary of Treasury on the State of the Finances for the Fiscal Year Ended June 30, 1934," p. 205.

From January 30, 1934, until March 1968, the gold transactions of the U.S. Government for both monetary and industrial purposes were made at \$35 per fine ounce, plus or minus a handling charge of one quarter of 1 percent and less mint charges. In 1968 a two-tiered gold system was instituted under which the private commodity price of gold is permitted to fluctuate without official intervention, while the official price and role of monetary gold remain unchanged among monetary authorities.

Following the termination of Treasury gold transactions on March 18, 1968, the Treasury issued gold licenses to certain banks and commodity firms to perform this service. The accompanying tables contain the daily market quotations for gold issued by two firms during the calendar years 1977 and 1978.

Daily market prices for industrial gold in the United States, quoted by Handy & Harman, New York, N.Y., for 1977

[Lowest prices at which offers can be obtained by Handy & Harman for gold, minimum 99.95 percent purity, for nearby delivery at New York in quantities sufficient to meet its needs]

Day	January	February	March	April	May	June
1	(*)	\$132.95	\$141.40	\$148.30	(*)	\$143.85
2	(*)	132.10		(*)	\$148.35	142.30
3	\$135.60	133.00	144.70	(*)	148.25	141.80
4	135.70	132.45	145.75	150.65	148.10	(*)
5	133.40	(*)	(*)	148.90	146.95	(*)
6	132.60	(*)	(*)	148.60		143.40
7	132.80	134.25	148.65	148.70	` '	143.30
8	(*)	134.70		(*)	(*)	142.30
9	(*)	136.10		(*)	147.30	140.60
10	131.35	135.85	147.05	(*)	147.85	140.25
11	130.10	135.00	146.30	149.70		(*)
12	130.85	(*)	(*)	150.05	147.20	(*)
13	132.20	(*) 136.45	(*) 146.10	152.20 152.05	148.50	138.40 137.45
15	131.80	130.43	146.10	150.65	(*) (*)	137.43
16	(*)	135.90	147.50	(*)	147.65	139.25
17	131.60	136.75	148.90	(*)	147.80	138.75
18	133.15	136.60	150.05	151.00	146.90	(*)
19	132.70	(*)	(*)	150.45	146.85	(*)
20	133.10	(*)	(*)	149.50	147.35	139.85
21	132.20	(*)	152.00	148.10	(*)	141.30
22	(*)	138.10	150.40	149.70	(*)	139.45
23	(*)	139.15	152.80	(*)	146.50	140.50
24	132.30	141.25	152.75	(*)	145.15	140.80
25	133.50	139.95	153.55	149.00	144.75	(*)
26	132.15	(*)	(*)	147.15	143.70	(*)
27	132.30	(*)	(*)	147.50	144.40	142.50
28	131.30	142.75	150.35	145.60	(*)	143.00
29	\ /		148.40	147.25	(*)	142.35 143.00
30			149.45	(*)	(*)	143.00
31	132.30		140.50.		143.30	
Day	Inly	August	Santambar	October	November	December
Day					November	
1	\$142.55	\$144.55	\$145.75	(*)	\$162.75	\$160.65
12	\$142.55 (*)	\$144.55 146.15	\$145.75 146.40	(*) (*)	\$162.75 161.85	\$160.65 159.10
1	\$142.55 (*) (*)	\$144.55	\$145.75 146.40 (*)	(*) (*) \$155.70	\$162.75 161.85 164.50	\$160.65 159.10 (*)
12	\$142.55 (*)	\$144.55 146.15 146.35	\$145.75 146.40 (*) (*)	(*) (*) \$155.70 155.20	\$162.75 161.85 164.50 166.15	\$160.65 159.10 (*) (*)
1	\$142.55 (*) (*) (*)	\$144.55 146.15 146.35 147.10	\$145.75 146.40 (*)	(*) (*) \$155.70	\$162.75 161.85 164.50	\$160.65 159.10 (*)
1	\$142.55 (*) (*) (*) (*) 141.25	\$144.55 146.15 146.35 147.10 145.80	\$145.75 146.40 (*) (*) (*)	(*) (*) \$155.70 155.20 155.30	\$162.75 161.85 164.50 166.15 (*)	\$160.65 159.10 (*) (*) 159.85
1	\$142.55 (*) (*) (*) 141.25 140.55 141.45 142.05	\$144.55 146.15 146.35 147.10 145.80 (*) (*) 146.15	\$145.75 146.40 (*) (*) (*) (*) 147.55 147.90	(*) (*) \$155.70 155.20 155.30 154.25 154.25 (*)	\$162.75 161.85 164.50 166.15 (*) (*)	\$160.65 159.10 (*) (*) 159.85 160.20
1	\$142.55 (*) (*) (*) 141.25 140.55 141.45 142.05 (*)	\$144.55 146.15 146.35 147.10 145.80 (*) (*) 146.15 146.85	\$145.75 146.40 (*) (*) (*) 147.55 147.90 147.85 147.45	(*) (*) \$155.70 155.20 155.30 154.25 154.25 (*) (*)	\$162.75 161.85 164.50 166.15 (*) (*) 166.75 166.15 167.75	\$160.65 159.10 (*) (*) 159.85 160.20 160.65 161.25 158.55
1	\$142.55 (*) (*) (*) 141.25 140.55 141.45 142.05 (*)	\$144.55 146.15 146.35 147.10 145.80 (*) (*) 146.15 146.85 146.20	\$145.75 146.40 (*) (*) (*) 147.55 147.90 147.85 147.45 (*)	(*) (*) \$155.70 155.20 155.30 154.25 154.25 (*) (*)	\$162.75 161.85 164.50 166.15 (*) (*) 166.75 166.15 167.75 167.25	\$160.65 159.10 (*) (*) 159.85 160.20 160.65 161.25 158.55 (*)
1	\$142.55 (*) (*) (*) 141.25 140.55 141.45 142.05 (*) (*) 140.90	\$144.55 146.15 146.35 147.10 145.80 (*) (*) 146.15 146.85 146.20 145.70	\$145.75 146.40 (*) (*) (*) 147.55 147.90 147.85 147.45 (*)	(*) (*) \$155.70 155.20 155.30 154.25 154.25 (*) (*) (*)	\$162.75 161.85 164.50 166.15 (*) (*) 166.75 166.15 167.75 167.25 168.10	\$160.65 159.10 (*) (*) 159.85 160.20 160.65 161.25 158.55 (*) (*)
1	\$142.55 (*) (*) (*) 141.25 140.55 141.45 142.05 (*) (*) 140.90 141.80	\$144.55 146.15 146.35 147.10 145.80 (*) (*) 146.15 146.85 146.20 145.70 145.25	\$145.75 146.40 (*) (*) (*) 147.55 147.90 147.85 147.45 (*) (*)	(*) (*) \$155.70 155.20 155.30 154.25 154.25 (*) (*) (*) 157.20 158.10	\$162.75 161.85 164.50 166.15 (*) (*) 166.75 166.15 167.75 167.25 168.10 (*)	\$160.65 159.10 (*) (*) 159.85 160.20 160.65 161.25 158.55 (*) (*)
1	\$142.55 (*) (*) (*) 141.25 140.55 141.45 142.05 (*) (*) 140.90 141.80 142.80	\$144.55 146.15 146.35 147.10 145.80 (*) (*) 146.15 146.85 146.20 145.70 145.25 (*)	\$145.75 146.40 (*) (*) (*) 147.55 147.90 147.85 147.45 (*) (*) 148.65 147.85	(*) (*) \$155.70 155.20 155.30 154.25 (*) (*) (*) (*) 157.20 158.10 158.30	\$162.75 161.85 164.50 166.15 (*) (*) 166.75 166.15 167.75 167.25 168.10 (*) (*)	\$160.65 159.10 (*) (*) 159.85 160.20 160.65 161.25 158.55 (*) (*) 158.80 157.75
1	\$142.55 (*) (*) (*) 141.25 140.55 141.45 142.05 (*) (*) 140.90 141.80 142.80 (*)	\$144.55 146.15 146.35 147.10 145.80 (*) (*) 146.15 146.85 146.20 145.70 145.25 (*) (*)	\$145.75 146.40 (*) (*) (*) 147.55 147.90 147.85 147.45 (*) (*) 148.65 147.85 148.15	(*) (*) \$155.70 155.20 155.30 154.25 (*) (*) (*) 157.20 158.10 158.30 157.80	\$162.75 161.85 164.50 166.15 (*) (*) 166.75 166.15 167.75 167.25 168.10 (*) (*)	\$160.65 159.10 (*) (*) 159.85 160.20 160.65 161.25 158.55 (*) (*) 158.80 157.75 160.45
1	\$142.55 (*) (*) (*) 141.25 140.55 141.45 142.05 (*) 140.90 141.80 142.80 (*) 144.60	\$144.55 146.15 146.35 147.10 145.80 (*) (*) 146.15 146.85 146.20 145.70 145.25 (*) (*)	\$145.75 146.40 (*) (*) (*) 147.55 147.90 147.85 147.45 (*) (*) 148.65 147.85 148.15	(*) (*) \$155.70 155.20 155.30 154.25 (*) (*) (*) 157.20 158.10 158.30 157.80 (*)	\$162.75 161.85 164.50 166.15 (*) (*) 166.75 166.15 167.75 167.25 168.10 (*) (*) (*)	\$160.65 159.10 (*) (*) 159.85 160.20 160.65 161.25 158.55 (*) (*) 158.80 157.75 160.45 159.20
1	\$142.55 (*) (*) (*) 141.25 140.55 141.45 142.05 (*) (*) 140.90 141.80 142.80 (*) 144.60 (*)	\$144.55 146.15 146.35 147.10 145.80 (*) (*) 146.15 146.85 146.20 145.70 145.25 (*) (*)	\$145.75 146.40 (*) (*) (*) 147.55 147.90 147.85 147.45 (*) 148.65 147.85 148.15 148.25 148.30	(*) (*) \$155.70 155.20 155.30 154.25 154.25 (*) (*) (*) 157.20 158.10 158.30 157.80 (*)	\$162.75 161.85 164.50 166.15 (*) (*) 166.75 167.75 167.25 168.10 (*) (*) (*) 165.20 163.00 160.25	\$160.65 159.10 (*) (*) 159.85 160.20 160.65 161.25 158.55 (*) (*) 158.80 157.75 160.45 159.20 160.35
1	\$142.55 (*) (*) (*) 141.25 140.55 141.45 142.05 (*) (*) 140.90 141.80 142.80 (*) (*) 144.60 (*) (*)	\$144.55 146.15 146.35 147.10 145.80 (*) (*) 146.15 146.85 146.20 145.70 145.25 (*) (*) 144.50 143.65 144.05	\$145.75 146.40 (*) (*) (*) 147.55 147.90 147.85 147.45 (*) (*) 148.65 147.85 148.15 148.25 148.30 (*)	(*) (*) \$155.70 155.20 155.30 154.25 154.25 (*) (*) (*) 157.20 158.30 157.80 (*) (*) (*) 160.45	\$162.75 161.85 164.50 166.15 (*) (*) 166.75 166.15 167.75 167.25 168.10 (*) (*) (*) 165.20 163.00 160.25 158.90	\$160.65 159.10 (*) (*) 159.85 160.20 160.65 161.25 158.55 (*) (*) 157.75 160.45 159.20 160.35 (*)
1	\$142.55 (*) (*) (*) 141.25 140.55 141.45 142.05 (*) (*) 140.90 141.80 142.80 (*) 144.60 (*) (*) 143.80	\$144.55 146.15 146.35 147.10 145.80 (*) (*) 146.15 146.85 146.20 145.70 145.25 (*) (*) (*)	\$145.75 146.40 (*) (*) (*) 147.55 147.90 147.85 147.45 (*) (*) 148.65 147.85 148.15 148.25 148.30 (*) (*)	(*) (*) \$155.70 155.20 155.30 154.25 154.25 (*) (*) (*) 157.20 158.10 158.30 157.80 (*)	\$162.75 161.85 164.50 166.15 (*) (*) 166.75 166.15 167.75 167.25 168.10 (*) (*) (*) 165.20 163.00 160.25 158.90 161.20	\$160.65 159.10 (*) (*) 159.85 160.20 160.65 161.25 158.55 (*) (*) 158.80 157.75 160.45 159.20 160.35 (*)
1	\$142.55 (*) (*) (*) 141.25 140.55 141.45 142.05 (*) (*) 140.90 141.80 142.80 (*) (*) 144.60 (*) (*)	\$144.55 146.15 146.35 147.10 145.80 (*) (*) 146.15 146.85 146.20 145.70 145.25 (*) (*) 144.50 143.65 144.05 143.55 144.50	\$145.75 146.40 (*) (*) (*) 147.55 147.90 147.85 147.45 (*) (*) 148.65 147.85 148.15 148.25 148.30 (*)	(*) (*) \$155.70 155.20 155.30 154.25 154.25 (*) (*) (*) 157.20 158.10 158.30 157.80 (*) (*) (*) 160.45 160.55	\$162.75 161.85 164.50 166.15 (*) (*) 166.75 166.15 167.75 167.25 168.10 (*) (*) 165.20 163.00 160.25 158.90 161.20 (*)	\$160.65 159.10 (*) (*) 159.85 160.20 160.65 161.25 158.55 (*) (*) 157.75 160.45 159.20 160.35 (*)
1	\$142.55 (*) (*) (*) 141.25 140.55 141.45 142.05 (*) (*) 140.90 141.80 142.80 (*) 144.60 (*) (*) (*) 143.80 145.75	\$144.55 146.15 146.35 147.10 145.80 (*) (*) 146.15 146.85 146.20 145.70 145.25 (*) (*) (*)	\$145.75 146.40 (*) (*) (*) 147.55 147.90 147.85 147.45 (*) (*) 148.65 147.85 148.15 148.25 148.30 (*) (*)	(*) (*) \$155.70 155.20 155.30 154.25 154.25 (*) (*) (*) 157.20 158.10 158.30 157.80 (*) (*) (*) 160.45 160.55 161.85	\$162.75 161.85 164.50 166.15 (*) (*) 166.75 166.15 167.75 167.25 168.10 (*) (*) (*) 165.20 163.00 160.25 158.90 161.20	\$160.65 159.10 (*) (*) 159.85 160.20 160.65 161.25 158.55 (*) (*) 158.80 157.75 160.45 159.20 160.35 (*) (*)
1	\$142.55 (*) (*) (*) 141.25 140.55 141.45 142.05 (*) (*) 140.90 141.80 142.80 (*) 144.60 (*) (*) (*) 143.80 145.75 145.15 144.00 144.95	\$144.55 146.15 146.35 147.10 145.80 (*) (*) 146.15 146.85 146.20 145.70 145.25 (*) (*) 144.50 143.65 144.05 143.55 144.05	\$145.75 146.40 (*) (*) (*) 147.55 147.90 147.85 147.45 (*) (*) 148.65 147.85 148.15 148.25 148.30 (*) (*) (*) 150.10 150.25 151.30 151.60	(*) (*) \$155.70 155.20 155.30 154.25 154.25 (*) (*) 157.20 158.10 158.30 157.80 (*) (*) 160.45 160.55 161.85 160.35 161.45 (*)	\$162.75 161.85 164.50 166.15 (*) (*) 166.75 166.15 167.75 167.25 168.10 (*) (*) 165.20 163.00 160.25 158.90 161.20 (*) (*) (*) 158.05 156.50	\$160.65 159.10 (*) (*) 159.85 160.20 160.65 161.25 158.55 (*) (*) 158.80 157.75 160.45 159.20 160.35 (*) (*) 160.10 159.85 160.30 159.40
1	\$142.55 (*) (*) (*) 141.25 140.55 141.45 142.05 (*) (*) 140.90 141.80 142.80 (*) 144.60 (*) (*) (*) 143.80 145.75 145.15 144.00 144.95 (*)	\$144.55 146.15 146.35 147.10 145.80 (*) (*) 146.15 146.85 146.20 145.70 145.25 (*) (*) 144.50 143.65 144.05 143.55 144.50 (*) (*)	\$145.75 146.40 (*) (*) (*) 147.55 147.90 147.85 147.45 (*) (*) 148.65 147.85 148.15 148.25 148.30 (*) (*) (*) 150.10 150.25 151.30 151.60 150.90	(*) (*) \$155.70 155.20 155.30 154.25 154.25 (*) (*) (*) 157.20 158.10 158.30 157.80 (*) (*) 160.45 160.55 161.85 160.35 161.45 (*) (*)	\$162.75 161.85 164.50 166.15 (*) (*) 166.75 166.15 167.75 167.25 168.10 (*) (*) 165.20 163.00 160.25 158.90 161.20 (*) (*) (*) 158.05 156.50 159.30	\$160.65 159.10 (*) (*) 159.85 160.20 160.65 161.25 158.55 (*) (*) 158.80 157.75 160.45 159.20 160.35 (*) (*) 160.10 159.85 160.30 159.40 162.50
1	\$142.55 (*) (*) (*) 141.25 140.55 141.45 142.05 (*) (*) 140.90 141.80 142.80 (*) 144.60 (*) (*) (*) 143.80 145.75 145.15 144.00 144.95 (*) (*)	\$144.55 146.15 146.35 147.10 145.80 (*) (*) 146.15 146.85 146.20 145.70 145.25 (*) (*) 144.50 143.65 144.05 143.55 144.50 (*) (*)	\$145.75 146.40 (*) (*) (*) 147.55 147.90 147.85 147.45 (*) (*) 148.65 147.85 148.15 148.25 148.30 (*) (*) (*) 150.10 150.25 151.30 151.60 150.90 (*)	(*) (*) \$155.70 155.20 155.30 154.25 154.25 (*) (*) (*) 157.20 158.10 158.30 157.80 (*) (*) (*) 160.45 160.55 161.85 160.35 161.45 (*) (*) 163.60	\$162.75 161.85 164.50 166.15 (*) (*) 166.75 166.15 167.75 167.25 168.10 (*) (*) 165.20 163.00 160.25 158.90 161.20 (*) (*) (*) 158.05 156.50 159.30 (*)	\$160.65 159.10 (*) (*) 159.85 160.20 160.65 161.25 158.55 (*) (*) 158.80 157.75 160.45 159.20 160.35 (*) (*) (*) 160.10 159.85 160.30 159.40 162.50 (*)
1	\$142.55 (*) (*) (*) 141.25 140.55 141.45 142.05 (*) (*) 140.90 141.80 142.80 (*) 144.60 (*) (*) (*) 143.80 145.75 145.15 144.00 144.95 (*) (*) 146.65	\$144.55 146.15 146.35 147.10 145.80 (*) (*) 146.15 146.85 146.20 145.70 145.25 (*) (*) 144.50 143.65 144.05 143.55 144.50 (*) (*)	\$145.75 146.40 (*) (*) (*) 147.55 147.90 147.85 147.45 (*) (*) 148.65 147.85 148.15 148.25 148.30 (*) (*) (*) 150.10 150.25 151.30 151.60 150.90 (*) (*)	(*) (*) \$155.70 155.20 155.30 154.25 154.25 (*) (*) (*) 157.20 158.10 158.30 157.80 (*) (*) (*) 160.45 160.55 161.85 160.35 161.45 (*) (*) 163.60 163.00	\$162.75 161.85 164.50 166.15 (*) (*) 166.75 166.75 167.25 168.10 (*) (*) 165.20 163.00 160.25 158.90 161.20 (*) (*) (*) 158.05 156.50 159.30 (*) (*) (*)	\$160.65 159.10 (*) (*) 159.85 160.20 160.65 161.25 158.55 (*) (*) 158.80 157.75 160.45 159.20 160.35 (*) (*) (*) 160.10 159.85 160.30 159.40 162.50 (*) (*)
1	\$142.55 (*) (*) (*) 141.25 140.55 141.45 142.05 (*) (*) 140.90 141.80 142.80 (*) 144.60 (*) (*) (*) 143.80 145.75 145.15 144.00 144.95 (*) (*) 146.65 145.65	\$144.55 146.15 146.35 147.10 145.80 (*) (*) 146.15 146.85 146.20 145.70 145.25 (*) (*) 144.50 143.65 144.05 143.55 144.50 (*) (*)	\$145.75 146.40 (*) (*) (*) (*) 147.55 147.90 147.85 147.45 (*) (*) 148.65 148.15 148.25 148.30 (*) (*) (*) 150.10 150.25 151.30 151.60 150.90 (*) (*)	(*) (*) \$155.70 155.20 155.30 154.25 154.25 (*) (*) (*) 157.20 158.10 158.30 157.80 (*) (*) (*) 160.45 160.55 161.85 160.35 161.45 (*) (*) 163.60 163.00 163.15	\$162.75 161.85 164.50 166.15 (*) (*) 166.75 166.15 167.75 167.25 168.10 (*) (*) 165.20 163.00 160.25 158.90 161.20 (*) (*) (*) (*) 158.05 156.50 159.30 (*) (*) (*) (*)	\$160.65 159.10 (*) (*) 159.85 160.20 160.65 161.25 158.55 (*) (*) 158.80 157.75 160.45 159.20 160.35 (*) (*) (*) 169.10 159.85 160.30 159.40 162.50 (*) (*)
1	\$142.55 (*) (*) (*) 141.25 140.55 141.45 142.05 (*) (*) 140.90 141.80 142.80 (*) 144.60 (*) (*) (*) 143.80 145.75 145.15 144.00 144.95 (*) (*) 146.65 145.65 146.10	\$144.55 146.15 146.35 147.10 145.80 (*) (*) 146.15 146.85 146.20 145.70 145.25 (*) (*) 144.50 143.65 144.05 143.55 144.60 (*) (*)	\$145.75 146.40 (*) (*) (*) (*) 147.55 147.90 147.85 147.45 (*) (*) 148.65 148.15 148.25 148.30 (*) (*) (*) 150.10 150.25 151.30 151.60 150.90 (*) (*)	(*) (*) \$155.70 155.20 155.30 154.25 154.25 (*) (*) 157.20 158.10 158.30 157.80 (*) (*) 160.45 160.55 161.85 160.35 161.45 (*) (*) 163.60 163.00 163.15 160.40	\$162.75 161.85 164.50 166.15 (*) (*) 166.75 166.15 167.75 167.25 168.10 (*) (*) 165.20 163.00 160.25 158.90 161.20 (*) (*) (*) 158.05 156.50 159.30 (*) (*) (*) (*) (*)	\$160.65 159.10 (*) (*) 159.85 160.20 160.65 161.25 158.55 (*) (*) 158.80 157.75 160.45 159.20 160.35 (*) (*) 160.10 159.85 160.30 159.40 162.50 (*) (*)
1	\$142.55 (*) (*) (*) 141.25 140.55 141.45 142.05 (*) 140.90 141.80 142.80 (*) 144.60 (*) (*) 143.80 145.75 145.15 144.00 144.95 (*) (*) 146.65 145.65 146.10 144.65	\$144.55 146.15 146.35 147.10 145.80 (*) (*) 146.15 146.85 146.20 145.70 145.25 (*) (*) 144.50 143.65 144.05 143.55 144.50 (*) (*) (*)	\$145.75 146.40 (*) (*) (*) (*) 147.55 147.90 147.85 147.45 (*) (*) 148.65 147.85 148.15 148.25 148.30 (*) (*) (*) 150.10 150.25 151.30 151.60 150.90 (*) (*)	(*) (*) \$155.70 155.20 155.30 154.25 154.25 (*) (*) (*) 157.20 158.10 158.30 157.80 (*) (*) (*) 160.45 160.55 161.85 160.35 161.45 (*) (*) (*) 163.60 163.00 163.15 160.40 161.20	\$162.75 161.85 164.50 166.15 (*) (*) 166.75 166.15 167.75 167.25 168.10 (*) (*) 165.20 163.00 160.25 158.90 161.20 (*) (*) (*) 158.05 156.50 159.30 (*) (*) (*) (*) (*)	\$160.65 159.10 (*) (*) (*) 159.85 160.20 160.65 161.25 158.55 (*) (*) 158.80 157.75 160.45 159.20 160.35 (*) (*) (*) 160.10 159.85 160.30 159.40 162.50 (*) (*)
1	\$142.55 (*) (*) (*) 141.25 140.55 141.45 142.05 (*) 140.90 141.80 142.80 (*) 144.60 (*) (*) 143.80 145.75 145.15 144.00 144.95 (*) (*) 146.65 145.65 146.10 144.65 144.35	\$144.55 146.15 146.35 147.10 145.80 (*) (*) 146.15 146.85 146.20 145.70 145.25 (*) (*) 144.50 143.65 144.05 143.55 144.50 (*) (*) (*) 144.45 143.75 144.60 144.20 145.35 (*) (*)	\$145.75 146.40 (*) (*) (*) (*) 147.55 147.90 147.85 147.45 (*) (*) 148.65 147.85 148.15 148.25 148.30 (*) (*) (*) 150.10 150.25 151.30 151.60 150.90 (*) (*)	(*) (*) (*) \$155.70 155.20 155.30 154.25 154.25 (*) (*) (*) 157.20 158.10 158.30 157.80 (*) (*) (*) 160.45 160.55 161.85 160.35 161.45 (*) (*) (*) 163.60 163.00 163.15 160.40 161.20 (*)	\$162.75 161.85 164.50 166.15 (*) (*) 166.75 166.15 167.75 167.25 168.10 (*) (*) 165.20 163.00 160.25 158.90 161.20 (*) (*) (*) 158.05 156.50 159.30 (*) (*) (*) (*) (*) (*) (*) (*) (*) (*)	\$160.65 159.10 (*) (*) (*) 159.85 160.20 160.65 161.25 158.55 (*) (*) 158.80 157.75 160.45 159.20 160.35 (*) (*) (*) 160.10 159.85 160.30 159.40 162.50 (*) (*) (*)
1	\$142.55 (*) (*) (*) 141.25 140.55 141.45 142.05 (*) 140.90 141.80 142.80 (*) 144.60 (*) (*) 143.80 145.75 145.15 144.00 144.95 (*) (*) 146.65 145.65 146.10 144.65	\$144.55 146.15 146.35 147.10 145.80 (*) (*) 146.15 146.85 146.20 145.70 145.25 (*) (*) 144.50 143.65 144.05 143.55 144.50 (*) (*) 144.45 143.75 144.60 144.20 145.35 (*) (*) (*) 146.50 146.50	\$145.75 146.40 (*) (*) (*) (*) 147.55 147.90 147.85 147.45 (*) (*) 148.65 147.85 148.15 148.25 148.30 (*) (*) (*) 150.10 150.25 151.30 151.60 150.90 (*) (*)	(*) (*) (*) \$155.70 155.20 155.30 154.25 154.25 (*) (*) (*) 157.20 158.10 158.30 157.80 (*) (*) (*) 160.45 160.55 161.85 160.35 161.45 (*) (*) (*) 163.60 163.00 163.15 160.40 161.20 (*) (*) (*)	\$162.75 161.85 164.50 166.15 (*) (*) 166.75 166.15 167.75 167.25 168.10 (*) (*) 165.20 163.00 160.25 158.90 161.20 (*) (*) (*) 158.05 156.50 159.30 (*) (*) (*) (*) (*)	\$160.65 159.10 (*) (*) (*) 159.85 160.20 160.65 161.25 158.55 (*) (*) 158.80 157.75 160.45 159.20 160.35 (*) (*) (*) 160.10 159.85 160.30 159.40 162.50 (*) (*)

^{*} Market closed

Daily market prices for industrial gold in the United States, quoted by Handy & Harman, New York, N.Y., for 1978

[Lowest prices at which offers can be obtained by Handy & Harman for gold, minimum 99 95 percent purity, for nearby delivery at New York in quantities sufficient to meet its needs]

Day	January	February	March	April	May	June
1	(*)	\$176.40	\$182.85	(*)	\$169.55	\$183.35
2	(*)	175.20	184.25	(*)	169.25	184.75
3	\$169.20	175.60	183.80	\$183.75	170.80	(*)
4	172.20	(*)	(*)	180.85	173.55	(*)
5	165.95	(*)	(*)	178.75		183.40
6	170.15	175.95	184.75	181.35	(*)	181.40
7	(*)	175.55		179.45	(*)	183.30
8	(*)	174.70		(*)	172.55	182.95
9	170.25	172.85	188.65	(*)	172.70	181.60
10	173.10	174.60		178.70		(*)
11	172.15	(*)	(*)	179.95	175.70	(*)
12	173.55	(*)	(*)	180.35		180.65
13	172.80	177.35	186.85	178.95	* /	182.35
14	(*)	177.40		178.50	(/	183.95
15	(*)	178.95	186.70	(*)	175.60	182.40
16	174.90	179.70	184.25	(*)	175.80	184.85
17	173.30	179.45	183.20	174.65	177.85	(*)
18	172.30	(*)	(*)	173.85	178.25	(*)
19	173.45	(*)	(*)	175.00 168.90	179.15	184.60
20	(*)	(*) 181.45	181.00 177.65	171.15	(*)	186.50
2122	(*) (*)	181.45	177.65	(*)	(*) 179.55	186.60 185.55
23	175.55	183.20	179.30	(*)	180.10	185.80
24	176.80	180.75	(*)	168.85	179.75	(*)
25	177.85	(*)	(*)	167.90	178.95	(*)
26	176.15	(*)	(*)	169.25	179.80	185.50
27	176.40	181.15	182.50	169.90	(*)	184.25
28	(*)	182.25	183.80	170.85	(*)	185.35
29	4.1		181.50	(*)	(*)	184.30
30			179.85	(*)	182.65	183.05
31						
Day	July		September		November	December
1	(+)					
	(*)	\$205.35	\$208.25	(*)	\$227.75	\$194.65
2	(*) (*)	\$205.35 203.50		(*) \$217.35	\$227.75 221.50	\$194.65 (*)
	(*) (*) \$183.25		\$208.25 (*) (*)			\$194.65 (*) (*)
2	(*)	203.50	(*)	\$217.35	221.50	(*)
2	(*) \$183.25	203.50 202.45	(*) (*)	\$217.35 221.65	221.50 215.20	(*) (*)
2 3 4	(*) \$183.25 (*)	203.50 202.45 201.80	(*) (*) (*)	\$217.35 221.65 223.75	221.50 215.20 (*)	(*) (*) 199.50
2	(*) \$183.25 (*) 184.45	203.50 202.45 201.80 (*)	(*) (*) (*) 209.70	\$217.35 221.65 223.75 222.70	221.50 215.20 (*) (*)	(*) (*) 199.50 196.65
2	(*) \$183.25 (*) 184.45 183.00	203.50 202.45 201.80 (*) (*)	(*) (*) (*) 209.70 212.00	\$217.35 221.65 223.75 222.70 223.35	221.50 215.20 (*) (*) 210.25	(*) (*) 199.50 196.65 196.50
2	(*) \$183.25 (*) 184.45 183.00 183.95	203.50 202.45 201.80 (*) (*) 204.30	(*) (*) (*) 209.70 212.00 210.75 206.15 (*)	\$217.35 221.65 223.75 222.70 223.35 (*)	221.50 215.20 (*) (*) 210.25 216.60	(*) (*) 199.50 196.65 196.50 198.55 202.00 (*)
2 3. 4	(*) \$183.25 (*) 184.45 183.00 183.95 (*) (*) 186.05	203.50 202.45 201.80 (*) (*) 204.30 207.20 207.95 206.75	(*) (*) (*) 209.70 212.00 210.75 206.15	\$217.35 221.65 223.75 222.70 223.35 (*) (*)	221.50 215.20 (*) (*) 210.25 216.60 219.05 213.95 206.25	(*) (*) 199.50 196.65 196.50 198.55 202.00 (*) (*)
2 3. 4. 5. 6. 7. 8.	(*) \$183.25 (*) 184.45 183.00 183.95 (*) (*) 186.05 185.50	203.50 202.45 201.80 (*) (*) 204.30 207.20 207.95 206.75 211.15	(*) (*) 209.70 212.00 210.75 206.15 (*) (*) 205.90	\$217.35 221.65 223.75 222.70 223.35 (*) (*) (*) 225.55 226.55	221.50 215.20 (*) (*) 210.25 216.60 219.05 213.95 206.25 (*)	(*) (*) 199.50 196.65 196.50 198.55 202.00 (*) (*) 207.00
2 3. 4	(*) \$183.25 (*) 184.45 183.00 183.95 (*) (*) 186.05 185.50 186.30	203.50 202.45 201.80 (*) (*) 204.30 207.20 207.95 206.75 211.15 (*)	(*) (*) (209.70 212.00 210.75 206.15 (*) (*) 205.90 208.25	\$217.35 221.65 223.75 222.70 223.35 (*) (*) (*) 225.55 226.55 225.80	221.50 215.20 (*) (*) 210.25 216.60 219.05 213.95 206.25 (*) (*)	(*) (*) 199.50 196.65 196.50 198.55 202.00 (*) (*) 207.00 202.15
2 3 4 5 6 7 8 9	(*) \$183.25 (*) 184.45 183.00 183.95 (*) (*) 186.05 185.50 186.30 186.70	203.50 202.45 201.80 (*) (*) 204.30 207.20 207.95 206.75 211.15 (*) (*)	(*) (*) (209.70 212.00 210.75 206.15 (*) (*) 205.90 208.25 209.95	\$217.35 221.65 223.75 222.70 223.35 (*) (*) (*) 225.55 226.55 225.80 224.50	221.50 215.20 (*) (*) 210.25 216.60 219.05 213.95 206.25 (*) (*) 208.10	(*) (*) 199.50 196.65 196.50 198.55 202.00 (*) (*) 207.00 202.15 203.10
2	(*) \$183.25 (*) 184.45 183.00 183.95 (*) (*) 186.05 185.50 186.30 186.70 186.00	203.50 202.45 201.80 (*) (*) 204.30 207.20 207.95 206.75 211.15 (*) (*) 213.75	(*) (*) (209.70 212.00 210.75 206.15 (*) (*) 205.90 208.25 209.95	\$217.35 221.65 223.75 222.70 223.35 (*) (*) (*) 225.55 226.55 225.80 224.50 (*)	221.50 215.20 (*) (*) 210.25 216.60 219.05 213.95 206.25 (*) (*) 208.10 211.25	(*) (*) 199.50 196.65 196.50 198.55 202.00 (*) (*) 207.00 202.15 203.10 204.25
2	(*) \$183.25 (*) 184.45 183.00 183.95 (*) (*) 186.05 185.50 186.30 186.70 186.00 (*)	203.50 202.45 201.80 (*) 204.30 207.20 207.95 206.75 211.15 (*) (*) 213.75 213.45	(*) (*) (209.70 212.00 210.75 206.15 (*) (*) 205.90 208.25 209.95 209.50 212.15	\$217.35 221.65 223.75 222.70 223.35 (*) (*) (*) 225.55 226.55 225.80 224.50 (*) (*)	221.50 215.20 (*) (*) 210.25 216.60 219.05 213.95 206.25 (*) (*) 208.10 211.25 204.40	(*) (*) 199.50 196.65 196.50 198.55 202.00 (*) (*) 207.00 202.15 203.10 204.25 205.60
2	(*) \$183.25 (*) 184.45 183.00 183.95 (*) (*) 186.05 186.30 186.70 186.00 (*) (*)	203.50 202.45 201.80 (*) (*) 204.30 207.20 207.95 206.75 211.15 (*) (*) 213.75 213.45 216.00	(*) (*) (*) 209.70 212.00 210.75 206.15 (*) (*) 205.90 208.25 209.95 209.50 212.15 (*)	\$217.35 221.65 223.75 222.70 223.35 (*) (*) (*) 225.55 226.55 225.80 224.50 (*) (*)	221.50 215.20 (*) (*) 210.25 216.60 219.05 213.95 206.25 (*) (*) 208.10 211.25 204.40 196.30	(*) (*) 199.50 196.65 196.50 198.55 202.00 (*) (*) 207.00 202.15 203.10 204.25 205.60 (*)
2	(*) \$183.25 (*) 184.45 183.00 183.95 (*) (*) 186.05 186.30 186.70 186.00 (*) (*)	203.50 202.45 201.80 (*) 204.30 207.20 207.95 206.75 211.15 (*) (*) 213.75 213.45 216.00 209.25	(*) (*) (*) 209.70 212.00 210.75 206.15 (*) (*) 205.90 208.25 209.95 209.50 212.15 (*) (*)	\$217.35 221.65 223.75 222.70 223.35 (*) (*) (*) 225.55 226.55 225.80 224.50 (*) (*) (*)	221.50 215.20 (*) (*) 210.25 216.60 219.05 213.95 206.25 (*) (*) 208.10 211.25 204.40 196.30 197.95	(*) (*) 199.50 196.65 196.50 198.55 202.00 (*) (*) 207.00 202.15 203.10 204.25 205.60 (*) (*)
2	(*) \$183.25 (*) 184.45 183.00 183.95 (*) (*) 186.05 185.50 186.30 186.70 186.00 (*) (*) (*) 185.05 185.10	203.50 202.45 201.80 (*) 204.30 207.20 207.95 206.75 211.15 (*) (*) 213.75 213.45 216.00 209.25 212.00	(*) (*) (*) 209.70 212.00 210.75 206.15 (*) (*) 205.90 208.25 209.95 209.50 212.15 (*) (*) 210.25	\$217.35 221.65 223.75 222.70 223.35 (*) (*) (*) 225.55 226.55 225.80 224.50 (*) (*) (*) 223.65 228.00 229.25	221.50 215.20 (*) (*) 210.25 216.60 219.05 213.95 206.25 (*) (*) 208.10 211.25 204.40 196.30 197.95 (*)	(*) (*) 199.50 196.65 196.50 198.55 202.00 (*) (*) 207.00 202.15 203.10 204.25 205.60 (*) (*) (*) (*)
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	(*) \$183.25 (*) 184.45 183.00 183.95 (*) (*) 186.05 185.50 186.30 186.70 186.00 (*) (*) (*) 185.05 185.10 185.95	203.50 202.45 201.80 (*) 204.30 207.20 207.95 206.75 211.15 (*) (*) 213.75 213.45 216.00 209.25 212.00 (*)	(*) (*) (*) 209.70 212.00 210.75 206.15 (*) (*) 205.90 208.25 209.95 209.50 212.15 (*) (*) 210.25 211.70	\$217.35 221.65 223.75 222.70 223.35 (*) (*) (*) 225.55 226.55 225.80 224.50 (*) (*) (*) 223.65 228.00 229.25 225.65	221.50 215.20 (*) (*) 210.25 216.60 219.05 213.95 206.25 (*) (*) 208.10 211.25 204.40 196.30 197.95 (*) (*)	(*) (*) 199.50 196.65 196.50 198.55 202.00 (*) (*) 207.00 202.15 203.10 204.25 205.60 (*) (*) (*) 213.15 216.30
2	(*) \$183.25 (*) 184.45 183.00 183.95 (*) (*) 186.05 185.50 186.30 186.70 186.00 (*) (*) (*) 185.05 185.10 185.95 188.65	203.50 202.45 201.80 (*) 204.30 207.20 207.95 206.75 211.15 (*) (*) 213.75 213.45 216.00 209.25 212.00 (*) (*)	(*) (*) (*) 209.70 212.00 210.75 206.15 (*) (*) 205.90 208.25 209.50 212.15 (*) (*) 210.25 211.70 213.85	\$217.35 221.65 223.75 222.70 223.35 (*) (*) (*) 225.55 226.55 225.80 224.50 (*) (*) 223.65 228.00 229.25 225.65 227.95	221.50 215.20 (*) (*) 210.25 216.60 219.05 213.95 206.25 (*) (*) 208.10 211.25 204.40 196.30 197.95 (*) (*)	(*) (*) 199.50 196.65 196.50 198.55 202.00 (*) (*) 207.00 202.15 203.10 204.25 205.60 (*) (*) (*) 213.15 216.30 216.60
2	(*) \$183.25 (*) 184.45 183.00 183.95 (*) (*) 186.05 185.50 186.30 186.70 186.00 (*) (*) (*) 185.05 185.10 185.95 188.65 192.00	203.50 202.45 201.80 (*) 204.30 207.20 207.95 206.75 211.15 (*) (*) 213.75 213.45 216.00 209.25 212.00 (*) (*)	(*) (*) (*) 209.70 212.00 210.75 206.15 (*) (*) 205.90 208.25 209.95 209.50 212.15 (*) (*) 210.25 211.70 213.85 215.90	\$217.35 221.65 223.75 222.70 223.35 (*) (*) (*) 225.55 226.55 225.80 224.50 (*) (*) (*) 223.65 228.00 229.25 225.65 227.95 (*)	221.50 215.20 (*) (*) 210.25 216.60 219.05 213.95 206.25 (*) (*) 208.10 211.25 204.40 196.30 197.95 (*) (*) 199.10 200.20	(*) (*) 199.50 196.65 196.50 198.55 202.00 (*) (*) 207.00 202.15 203.10 204.25 205.60 (*) (*) (*) 213.15 216.30 216.60 212.60
2	(*) \$183.25 (*) 184.45 183.00 183.95 (*) (*) 186.05 185.50 186.30 186.70 186.00 (*) (*) (*) 185.05 185.10 185.95 188.65 192.00 (*)	203.50 202.45 201.80 (*) 204.30 207.20 207.95 206.75 211.15 (*) (*) 213.75 213.45 216.00 209.25 212.00 (*) (*)	(*) (*) (*) 209.70 212.00 210.75 206.15 (*) (*) 205.90 208.25 209.95 209.50 212.15 (*) (*) 210.25 211.70 213.85 215.90 214.60	\$217.35 221.65 223.75 222.70 223.35 (*) (*) (*) 225.55 226.55 225.80 224.50 (*) (*) 223.65 228.00 229.25 225.65 227.95 (*) (*)	221.50 215.20 (*) (*) 210.25 216.60 219.05 213.95 206.25 (*) (*) 208.10 211.25 204.40 196.30 197.95 (*) (*) 199.10 200.20 199.25	(*) (*) 199.50 196.65 196.50 198.55 202.00 (*) (*) 207.00 202.15 203.10 204.25 205.60 (*) (*) (*) 213.15 216.30 216.60 212.60 215.10
2	(*) \$183.25 (*) 184.45 183.00 183.95 (*) (*) 186.05 185.50 186.30 186.70 186.00 (*) (*) (*) 185.05 185.10 185.95 188.65 192.00 (*) (*) (*)	203.50 202.45 201.80 (*) 204.30 207.20 207.95 206.75 211.15 (*) (*) 213.75 213.45 216.00 209.25 212.00 (*) (*) 205.15 207.65 200.45	(*) (*) (*) 209.70 212.00 210.75 206.15 (*) (*) 205.90 208.25 209.95 209.50 212.15 (*) (*) 210.25 211.70 213.85 215.90 214.60 (*)	\$217.35 221.65 223.75 222.70 223.35 (*) (*) (*) 225.55 226.55 225.80 224.50 (*) (*) 223.65 228.00 229.25 225.65 227.95 (*) (*)	221.50 215.20 (*) (*) 210.25 216.60 219.05 213.95 206.25 (*) (*) 208.10 211.25 204.40 196.30 197.95 (*) (*) 199.10 200.20 199.25 (*)	(*) (*) 199.50 196.65 196.50 198.55 202.00 (*) (*) 207.00 202.15 203.10 204.25 205.60 (*) (*) (*) 213.15 216.30 216.60 212.60 215.10 (*)
2	(*) \$183.25 (*) 184.45 183.00 183.95 (*) (*) 186.05 185.50 186.30 186.70 186.00 (*) (*) (*) 185.05 185.10 185.95 188.65 192.00 (*) (*) (*) 195.45	203.50 202.45 201.80 (*) (*) 204.30 207.20 207.95 206.75 211.15 (*) (*) 213.75 213.45 216.00 209.25 212.00 (*) (*) 205.15 207.65 200.45 203.25	(*) (*) (*) 209.70 212.00 210.75 206.15 (*) (*) 205.90 208.25 209.95 209.50 212.15 (*) (*) 210.25 211.70 213.85 215.90 214.60 (*) (*)	\$217.35 221.65 223.75 222.70 223.35 (*) (*) (*) 225.55 226.55 225.80 224.50 (*) (*) (*) 223.65 228.00 229.25 225.65 227.95 (*) (*)	221.50 215.20 (*) (*) 210.25 216.60 219.05 213.95 206.25 (*) (*) 208.10 211.25 204.40 196.30 197.95 (*) (*) 199.10 200.20 199.25 (*) (*)	(*) (*) 199.50 196.65 196.50 198.55 202.00 (*) (*) 207.00 202.15 203.10 204.25 205.60 (*) (*) 213.15 216.30 216.60 212.60 215.10 (*) (*) (*)
2 3 4 5 6 7 8 9 10 11 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25	(*) \$183.25 (*) 184.45 183.00 183.95 (*) (*) 186.05 185.50 186.30 186.70 186.00 (*) (*) (*) 185.05 185.10 185.95 188.65 192.00 (*) (*) (*) 195.45 193.55	203.50 202.45 201.80 (*) (*) 204.30 207.20 207.95 206.75 211.15 (*) (*) 213.75 213.45 216.00 209.25 212.00 (*) (*) (*) 205.15 207.65 200.45 203.25 198.25	(*) (*) (*) 209.70 212.00 210.75 206.15 (*) (*) 205.90 208.25 209.95 209.50 212.15 (*) (*) 210.25 211.70 213.85 215.90 214.60 (*) (*) 218.65	\$217.35 221.65 223.75 222.70 223.35 (*) (*) 225.55 226.55 225.80 224.50 (*) (*) 223.65 228.00 229.25 225.65 227.95 (*) (*) 227.00 226.05 231.15	221.50 215.20 (*) (*) 210.25 216.60 219.05 213.95 206.25 (*) (*) 208.10 211.25 204.40 196.30 197.95 (*) (*) 199.10 200.20 199.25 (*) (*) (*)	(*) (*) 199.50 196.65 196.50 198.55 202.00 (*) (*) 207.00 202.15 203.10 204.25 205.60 (*) (*) (*) 213.15 216.30 216.60 212.60 215.10 (*) (*) (*) (*) (*)
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26	(*) \$183.25 (*) 184.45 183.00 183.95 (*) (*) 186.05 185.50 186.30 186.70 186.00 (*) (*) (*) 185.05 185.10 185.95 188.65 192.00 (*) (*) (*) 195.45 193.55 194.55	203.50 202.45 201.80 (*) 204.30 207.20 207.95 206.75 211.15 (*) (*) 213.75 213.45 216.00 209.25 212.00 (*) (*) 205.15 207.65 200.45 203.25 198.25 (*)	(*) (*) (*) 209.70 212.00 210.75 206.15 (*) (*) 205.90 208.25 209.95 209.50 212.15 (*) (*) 210.25 211.70 213.85 215.90 214.60 (*) (*) 218.65 218.25	\$217.35 221.65 223.75 222.70 223.35 (*) (*) (*) 225.55 226.55 225.80 224.50 (*) (*) (*) 223.65 228.00 229.25 225.65 227.95 (*) (*) 227.00 226.05 231.15 233.95	221.50 215.20 (*) (*) 210.25 216.60 219.05 213.95 206.25 (*) (*) 208.10 211.25 204.40 196.30 197.95 (*) (*) 199.10 200.20 199.25 (*) (*) (*) (*) (*)	(*) (*) 199.50 196.65 196.50 198.55 202.00 (*) (*) 207.00 202.15 203.10 204.25 205.60 (*) (*) (*) 213.15 216.30 216.60 212.60 215.10 (*) (*) (*) (*) (*)
2	(*) \$183.25 (*) 184.45 183.00 183.95 (*) (*) 186.05 185.50 186.30 186.70 186.00 (*) (*) (*) 185.05 185.10 185.95 188.65 192.00 (*) (*) (*) (*) 195.45 193.55 194.30	203.50 202.45 201.80 (*) (*) 204.30 207.20 207.95 206.75 211.15 (*) (*) 213.75 213.45 216.00 209.25 212.00 (*) (*) (*) 205.15 207.65 200.45 203.25 198.25 (*) (*)	(*) (*) (*) 209.70 212.00 210.75 206.15 (*) (*) 205.90 208.25 209.95 209.50 212.15 (*) (*) 210.25 211.70 213.85 215.90 214.60 (*) (*) (*) 218.65 218.25 215.05	\$217.35 221.65 223.75 222.70 223.35 (*) (*) (*) 225.55 226.55 225.80 224.50 (*) (*) (*) 223.65 228.00 229.25 225.65 227.95 (*) (*) 227.00 226.05 231.15 233.95 234.75	221.50 215.20 (*) (*) (*) 210.25 216.60 219.05 213.95 206.25 (*) (*) 208.10 211.25 204.40 196.30 197.95 (*) (*) 199.10 200.20 199.25 (*) (*) (*) (*) (*) (*) 198.40	(*) (*) 199.50 196.65 196.50 198.55 202.00 (*) (*) 207.00 202.15 203.10 204.25 205.60 (*) (*) (*) (*) 213.15 216.30 216.60 212.60 215.10 (*) (*) (*) (*)
2	(*) \$183.25 (*) 184.45 183.00 183.95 (*) (*) 186.05 185.50 186.30 186.70 186.00 (*) (*) (*) 185.05 185.10 185.95 188.65 192.00 (*) (*) (*) (*) 195.45 193.55 194.30 201.30	203.50 202.45 201.80 (*) (*) 204.30 207.20 207.95 206.75 211.15 (*) (*) 213.75 213.45 216.00 209.25 212.00 (*) (*) (*) 205.15 207.65 200.45 203.25 198.25 (*) (*) 199.60	(*) (*) (*) 209.70 212.00 210.75 206.15 (*) (*) 205.90 208.25 209.95 209.50 212.15 (*) (*) 210.25 211.70 213.85 215.90 214.60 (*) (*) (*) 218.65 218.25 215.05 218.15	\$217.35 221.65 223.75 222.70 223.35 (*) (*) (*) 225.55 226.55 225.80 224.50 (*) (*) (*) 223.65 228.00 229.25 227.95 (*) (*) (*) 227.00 226.05 231.15 233.95 234.75 (*)	221.50 215.20 (*) (*) (*) 210.25 216.60 219.05 213.95 206.25 (*) (*) 208.10 211.25 204.40 196.30 197.95 (*) (*) 199.10 200.20 199.25 (*) (*) (*) (*) 198.40 196.40	(*) (*) 199.50 196.65 196.50 198.55 202.00 (*) (*) 207.00 202.15 203.10 204.25 205.60 (*) (*) (*) (*) 213.15 216.30 216.60 212.60 215.10 (*) (*) (*) (*) 214.75 220.50 220.65
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29	(*) \$183.25 (*) 184.45 183.00 183.95 (*) (*) 186.05 185.50 186.30 186.70 186.00 (*) (*) (*) 185.05 185.10 185.95 185.10 185.95 188.65 192.00 (*) (*) (*) (*) 195.45 193.55 194.30 201.30 (*)	203.50 202.45 201.80 (*) (*) 204.30 207.20 207.95 206.75 211.15 (*) (*) 213.75 213.45 216.00 209.25 212.00 (*) (*) 205.15 207.65 200.45 203.25 198.25 (*) (*) 199.60 199.95	(*) (*) (*) 209.70 212.00 210.75 206.15 (*) (*) 205.90 208.25 209.95 209.50 212.15 (*) (*) 210.25 211.70 213.85 215.90 214.60 (*) (*) (*) 218.65 218.25 215.05 218.15 217.10	\$217.35 221.65 223.75 222.70 223.35 (*) (*) (*) 225.55 226.55 225.80 224.50 (*) (*) 223.65 228.00 229.25 225.65 227.95 (*) (*) (*) 227.00 226.05 231.15 233.95 234.75 (*) (*) (*)	221.50 215.20 (*) (*) (*) 210.25 216.60 219.05 213.95 206.25 (*) (*) 208.10 211.25 204.40 196.30 197.95 (*) (*) 199.10 200.20 199.25 (*) (*) (*) (*) 198.40 196.40 195.60	(*) (*) (*) 199.50 196.65 196.50 198.55 202.00 (*) (*) 207.00 202.15 203.10 204.25 205.60 (*) (*) (*) (*) 213.15 216.30 216.60 212.60 215.10 (*) (*) (*) (*) 214.75 220.50 220.65 226.00
2	(*) \$183.25 (*) 184.45 183.00 183.95 (*) (*) 186.05 185.50 186.30 186.70 186.00 (*) (*) (*) 185.05 185.10 185.95 188.65 192.00 (*) (*) (*) (*) 195.45 193.55 194.30 201.30	203.50 202.45 201.80 (*) (*) 204.30 207.20 207.95 206.75 211.15 (*) (*) 213.75 213.45 216.00 209.25 212.00 (*) (*) 205.15 207.65 200.45 203.25 198.25 (*) (*) 199.60 199.95 205.05	(*) (*) (*) 209.70 212.00 210.75 206.15 (*) (*) 205.90 208.25 209.95 209.50 212.15 (*) (*) 210.25 211.70 213.85 215.90 214.60 (*) (*) (*) 218.65 218.25 215.05 218.15	\$217.35 221.65 223.75 222.70 223.35 (*) (*) (*) 225.55 226.55 225.80 224.50 (*) (*) 223.65 228.00 229.25 225.65 227.95 (*) (*) (*) 227.00 226.05 231.15 233.95 234.75 (*) (*) 242.75	221.50 215.20 (*) (*) (*) 210.25 216.60 219.05 213.95 206.25 (*) (*) 208.10 211.25 204.40 196.30 197.95 (*) (*) 199.10 200.20 199.25 (*) (*) (*) (*) 198.40 196.40	(*) (*) 199.50 196.65 196.50 198.55 202.00 (*) (*) 207.00 202.15 203.10 204.25 205.60 (*) (*) (*) (*) 213.15 216.30 216.60 212.60 215.10 (*) (*) (*) (*) 214.75 220.50 220.65

^{*} Market closed.

Daily market prices for industrial gold in the United States, quoted by Engelhard Minerals & Chemicals Corp., New York, N.Y., for 1977 1

Day	January	February	March	April	May	June
1	(*)	\$133.10	\$141.90	\$148.80	(*)	\$144.35
2	(*)	132.60	145.55	(*)	\$148.85	142.45
3	\$136.10	133.50	145.20	(*)	148.75	141.95
4	136.20	132.95	145.90	150.80	148.60	(*)
5	133.55	(*)	(*)	149.15	147.45	(*)
6	133.10	(*)	(*)	149.10	148.75	143.75
7	133.30	134.75	148.80	149.20	(*)	143.85
8	(*)	135.20	148.75	(*)	(*)	142.80
9	(*)	136.60	146.40	(*)	147.80	141.10
10	131.50	136.35	147.55	(*)	148.00	140.50
11	130.25	135.50	146.80	149.85	148.20	(*)
12	131.00	(*)	(*)	150.20	147.70	(*)
13	132.70 131.95	(*) 136.95	(*) 146.25	152.70 152.55	148.65	138.90 137.60
14	(*)	136.40	146.25	151.15	(*) (*)	137.60
16	(*)	136.40	148.00	(*)	148.15	140.35
17	132.08	136.90	149.40	(*)	148.30	139.25
18	133.30	137.10	150.55	151.50	147.40	(*)
19	133.20	(*)	(*)	150.95	147.35	(*)
20	133.60	(*)	(*)	150.00	147.85	140.35
21	132.70	(*)	152.50	148.60	(*)	141.80
22	(*)	138.60	150.90	150.20	(*)	139.95
23	(*)	139.65	153.30	(*)	147.00	140.65
24	132.80	141.75	153.25	(*)	145.30	141.30
25	134.00	140.43	154.05	149.25	145.25	(*)
26	132.65	(*)	(*)	147.65	144.20	(*)
27	132.80	(*)	(*)	148.00	144.90	143.00
28	131.80	143.25	150.50	146.10	(*)	143.50
29			148.90 149.95	147.75	(*) (*)	142.85 143.50
31						
		August S				
Day	July	ADDING S	Sentember			
						December
1	\$143.05	\$144.70	\$145.93	(*)	\$163.00	\$160.80
2	\$143.05 (*)	\$144.70 146.30	\$145.93 146.90	(*) (*)	\$163.00 162.00	\$160.80 159.25
2	\$143.05 (*) (*)	\$144.70 146.30 146.50	\$145.93 146.90 (*)	(*) (*) \$155.95	\$163.00 162.00 164.75	\$160.80 159.25 (*)
2 3 4	\$143.05 (*) (*) (*)	\$144.70 146.30 146.50 147.25	\$145.93 146.90 (*) (*)	(*) (*) \$155.95 155.35	\$163.00 162.00 164.75 166.40	\$160.80 159.25 (*) (*)
2	\$143.05 (*) (*) (*) (*) 141.75	\$144.70 146.30 146.50 147.25 145.95	\$145.93 146.90 (*) (*) (*)	(*) (*) \$155.95 155.35 155.55	\$163.00 162.00 164.75 166.40 (*)	\$160.80 159.25 (*) (*) 160.00
2	\$143.05 (*) (*) (*) 141.75 141.05	\$144.70 146.30 146.50 147.25 145.95 (*)	\$145.93 146.90 (*) (*) (*) (*) 147.80	(*) (*) \$155.95 155.35 155.55 154.50	\$163.00 162.00 164.75 166.40 (*) (*)	\$160.80 159.25 (*) (*) 160.00 160.35
2	\$143.05 (*) (*) (*) 141.75 141.05 141.95	\$144.70 146.30 146.50 147.25 145.95 (*) (*)	\$145.93 146.90 (*) (*) (*) (*) 147.80 148.15	(*) (*) \$155.95 155.35 155.55 154.50 154.45	\$163.00 162.00 164.75 166.40 (*) (*) 166.90	\$160.80 159.25 (*) (*) 160.00 160.35 160.80
2 3 4 5 6 7	\$143.05 (*) (*) (*) 141.75 141.05 141.95 142.55	\$144.70 146.30 146.50 147.25 145.95 (*) (*) 146.30	\$145.93 146.90 (*) (*) (*) 147.80 148.15 148.00	(*) (*) \$155.95 155.35 155.55 154.50 154.45 (*)	\$163.00 162.00 164.75 166.40 (*) (*) 166.90 (*)	\$160.80 159.25 (*) (*) 160.00 160.35 160.80 161.40
2 3 4 5 6 7 8	\$143.05 (*) (*) (*) 141.75 141.05 141.95 142.55 (*)	\$144.70 146.30 146.50 147.25 145.95 (*) (*) 146.30 147.00	\$145.93 146.90 (*) (*) (*) 147.80 148.15 148.00 147.95	(*) (*) \$155.95 155.35 155.55 154.50 154.45 (*) (*)	\$163.00 162.00 164.75 166.40 (*) (*) 166.90 (*) 168.00	\$160.80 159.25 (*) (*) 160.00 160.35 160.80 161.40 159.05
2 3 4 5 6 7 8 9	\$143.05 (*) (*) (*) 141.75 141.05 141.95 142.55 (*) (*)	\$144.70 146.30 146.50 147.25 145.95 (*) (*) 146.30 147.00 146.35	\$145.93 146.90 (*) (*) (*) 147.80 148.15 148.00 147.95 (*)	(*) (*) \$155.95 155.35 155.55 154.50 154.45 (*) (*)	\$163.00 162.00 164.75 166.40 (*) (*) 166.90 (*) 168.00 167.40	\$160.80 159.25 (*) (*) 160.00 160.35 160.80 161.40 159.05 (*)
2 3 4 5 6 7 8 9	\$143.05 (*) (*) (*) 141.75 141.05 141.95 142.55 (*) (*)	\$144.70 146.30 146.50 147.25 145.95 (*) (*) 146.30 147.00 146.35 145.85	\$145.93 146.90 (*) (*) (*) 147.80 148.15 148.00 147.95 (*)	(*) (*) \$155.95 155.35 155.55 154.50 154.45 (*) (*) 157.65 157.35	\$163.00 162.00 164.75 166.40 (*) (*) 166.90 (*) 168.00 167.40 168.45	\$160.80 159.25 (*) (*) 160.00 160.35 160.80 161.40 159.05 (*) (*)
2 3 4 5 6 7 8 9	\$143.05 (*) (*) (*) 141.75 141.05 141.95 142.55 (*) (*)	\$144.70 146.30 146.50 147.25 145.95 (*) (*) 146.30 147.00 146.35	\$145.93 146.90 (*) (*) (*) 147.80 148.15 148.00 147.95 (*)	(*) (*) \$155.95 155.35 155.55 154.50 154.45 (*) (*)	\$163.00 162.00 164.75 166.40 (*) (*) 166.90 (*) 168.00 167.40 168.45 (*)	\$160.80 159.25 (*) (*) 160.00 160.35 160.80 161.40 159.05 (*)
2 3 4 5 6 7 8 9 10 11	\$143.05 (*) (*) (*) 141.75 141.05 141.95 142.55 (*) (*) 141.40 142.30	\$144.70 146.30 146.50 147.25 145.95 (*) (*) 146.30 147.00 146.35 145.85	\$145.93 146.90 (*) (*) (*) 147.80 148.15 148.00 147.95 (*) (*)	(*) (*) \$155.95 155.35 155.55 154.50 154.45 (*) (*) 157.65 157.35	\$163.00 162.00 164.75 166.40 (*) (*) 166.90 (*) 168.00 167.40 168.45	\$160.80 159.25 (*) (*) 160.00 160.35 160.80 161.40 159.05 (*) (*)
2 3 4 5 6 7 8 9 10 11 12 13 14	\$143.05 (*) (*) (*) 141.75 141.05 141.95 142.55 (*) (*) 141.40 142.30 143.30 144.35 145.10	\$144.70 146.30 146.50 147.25 145.95 (*) (*) 146.30 147.00 146.35 145.85 145.40 (*) (*)	\$145.93 146.90 (*) (*) (*) 147.80 148.15 148.00 147.95 (*) (*) 148.80 148.00	(*) (*) \$155.95 155.35 155.55 154.50 154.45 (*) (*) 157.65 157.35 158.25 158.45	\$163.00 162.00 164.75 166.40 (*) (*) 166.90 (*) 168.00 167.40 168.45 (*)	\$160.80 159.25 (*) (*) 160.00 160.35 160.80 161.40 159.05 (*) (*) (*)
2 3 4 5 6 7 8 9 10 11 12 13 14 15	\$143.05 (*) (*) (*) 141.75 141.05 141.95 142.55 (*) (*) 141.40 142.30 143.30 144.35 145.10 (*)	\$144.70 146.30 146.50 147.25 145.95 (*) (*) 146.30 147.00 146.35 145.85 145.40 (*) (*)	\$145.93 146.90 (*) (*) (*) 147.80 148.15 148.00 147.95 (*) (*) 148.80 148.00 148.40 148.40 148.80	(*) (*) \$155.95 155.35 155.55 154.50 154.45 (*) (*) 157.65 157.35 158.25 158.45 158.30 (*) (*)	\$163.00 162.00 164.75 166.40 (*) (*) 166.90 (*) 168.00 167.40 168.45 (*) (*) 165.70 163.15 160.75	\$160.80 159.25 (*) (*) 160.00 160.35 160.80 161.40 159.05 (*) (*) 159.30 158.10 160.60 159.35 160.50
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	\$143.05 (*) (*) (*) 141.75 141.05 141.95 142.55 (*) (*) 141.40 142.30 143.30 144.35 145.10 (*) (*)	\$144.70 146.30 146.50 147.25 145.95 (*) (*) 146.30 147.00 146.35 145.85 145.40 (*) (*) (*)	\$145.93 146.90 (*) (*) (*) 147.80 148.15 148.00 147.95 (*) (*) 148.80 148.40 148.40 148.80 (*)	(*) (*) \$155.95 155.35 155.55 154.50 154.45 (*) (*) 157.65 157.35 158.25 158.45 158.30 (*) (*)	\$163.00 162.00 164.75 166.40 (*) (*) 166.90 (*) 168.00 167.40 168.45 (*) (*) 165.70 163.15 160.75 159.15	\$160.80 159.25 (*) (*) 160.00 160.35 160.80 161.40 159.05 (*) (*) 159.30 158.10 160.60 159.35 160.50 (*)
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	\$143.05 (*) (*) (*) 141.75 141.05 141.95 142.55 (*) (*) 141.40 142.30 143.30 144.35 145.10 (*) (*) 144.05	\$144.70 146.30 146.50 147.25 145.95 (*) (*) 146.30 147.00 146.35 145.85 145.40 (*) (*) (*) 144.65 143.80 144.20 144.05	\$145.93 146.90 (*) (*) (*) 147.80 148.15 148.00 147.95 (*) 148.80 148.40 148.40 148.40 (*) (*)	(*) (*) \$155.95 155.35 155.55 154.50 154.45 (*) (*) 157.65 157.35 158.25 158.45 158.30 (*) (*) 160.70 160.80	\$163.00 162.00 164.75 166.40 (*) (*) 166.90 (*) 168.00 167.40 168.45 (*) (*) 165.70 163.15 160.75 159.15	\$160.80 159.25 (*) (*) 160.00 160.35 160.80 161.40 159.05 (*) (*) (*) 159.30 158.10 160.60 159.35 160.50 (*)
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	\$143.05 (*) (*) (*) 141.75 141.05 141.95 142.55 (*) (*) 141.40 142.30 143.30 144.35 145.10 (*) (*) 144.05 146.00	\$144.70 146.30 146.50 147.25 145.95 (*) (*) 146.30 147.00 146.35 145.85 145.40 (*) (*) (*) 144.65 143.80 144.20 144.05 145.00	\$145.93 146.90 (*) (*) (*) 147.80 148.15 148.00 147.95 (*) 148.80 148.40 148.40 148.40 (*) (*)	(*) (*) \$155.95 155.35 155.55 154.50 154.45 (*) (*) 157.65 157.35 158.25 158.45 158.30 (*) (*) 160.70 160.80 162.10	\$163.00 162.00 164.75 166.40 (*) (*) 166.90 (*) 168.00 167.40 168.45 (*) (*) 165.70 163.15 160.75 159.15 161.35 (*)	\$160.80 159.25 (*) (*) 160.00 160.35 160.80 161.40 159.05 (*) (*) (*) 159.30 158.10 160.60 159.35 160.50 (*) (*)
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	\$143.05 (*) (*) (*) 141.75 141.05 141.95 142.55 (*) (*) 141.40 142.30 143.30 144.35 145.10 (*) (*) 144.05 146.00 145.40	\$144.70 146.30 146.50 147.25 145.95 (*) (*) 146.30 147.00 146.35 145.85 145.40 (*) (*) (*) 144.65 143.80 144.20 144.05 145.00 (*)	\$145.93 146.90 (*) (*) (*) (*) 147.80 148.15 148.00 147.95 (*) (*) 148.80 148.40 148.40 148.40 (*) (*) (*) 150.25 150.40	(*) (*) \$155.95 155.35 155.55 154.50 154.45 (*) (*) 157.65 157.35 158.25 158.45 158.30 (*) (*) 160.70 160.80 162.10 160.60	\$163.00 162.00 164.75 166.40 (*) (*) 166.90 (*) 168.00 167.40 168.45 (*) (*) 165.70 163.15 160.75 159.15 161.35 (*) (*)	\$160.80 159.25 (*) (*) 160.00 160.35 160.80 161.40 159.05 (*) (*) 159.30 158.10 160.60 159.35 160.50 (*) (*)
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	\$143.05 (*) (*) (*) 141.75 141.05 141.95 142.55 (*) (*) 141.40 142.30 143.30 144.35 145.10 (*) (*) 144.05 146.00 145.40 144.50	\$144.70 146.30 146.50 147.25 145.95 (*) (*) 146.30 147.00 146.35 145.85 145.40 (*) (*) (*) 144.65 143.80 144.20 144.05 145.00 (*)	\$145.93 146.90 (*) (*) (*) 147.80 148.15 148.00 147.95 (*) (*) 148.80 148.00 148.40 148.40 148.80 (*) (*) (*)	(*) (*) \$155.95 155.35 155.55 154.50 154.45 (*) (*) 157.65 157.35 158.25 158.45 158.30 (*) (*) (*) 160.70 160.80 162.10 160.60 161.70	\$163.00 162.00 164.75 166.40 (*) (*) 166.90 (*) 168.00 167.40 168.45 (*) (*) 165.70 163.15 160.75 159.15 161.35 (*) (*)	\$160.80 159.25 (*) (*) 160.00 160.35 160.80 161.40 159.05 (*) (*) 159.30 158.10 160.60 159.35 160.50 (*) (*)
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	\$143.05 (*) (*) (*) 141.75 141.05 141.95 142.55 (*) (*) 141.40 142.30 143.30 144.35 145.10 (*) (*) 144.05 146.00 145.40 144.50 145.20	\$144.70 146.30 146.50 147.25 145.95 (*) (*) 146.30 147.00 146.35 145.85 145.40 (*) (*) (*) 144.65 144.05 144.05 144.05 144.05	\$145.93 146.90 (*) (*) (*) 147.80 148.15 148.00 147.95 (*) (*) 148.80 148.00 148.40 148.40 148.40 150.25 150.25 150.40 151.80 152.10	(*) (*) \$155.95 155.35 155.55 154.50 154.45 (*) (*) 157.65 157.35 158.25 158.45 158.30 (*) (*) 160.70 160.80 162.10 160.60 161.70 (*)	\$163.00 162.00 164.75 166.40 (*) (*) 166.90 (*) 168.00 167.40 168.45 (*) (*) 165.70 163.15 160.75 159.15 161.35 (*) (*)	\$160.80 159.25 (*) (*) 160.00 160.35 160.80 161.40 159.05 (*) (*) 159.30 158.10 160.60 159.35 160.50 (*) (*)
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	\$143.05 (*) (*) (*) 141.75 141.05 141.95 142.55 (*) (*) 141.40 142.30 143.30 144.35 145.10 (*) (*) 144.05 146.00 145.40 144.50 145.20 (*)	\$144.70 146.30 146.50 147.25 145.95 (*) (*) 146.30 147.00 146.35 145.85 145.40 (*) (*) (*) 144.65 143.80 144.20 144.05 145.00 (*) (*)	\$145.93 146.90 (*) (*) (*) 147.80 148.15 148.00 147.95 (*) (*) 148.80 148.00 148.40 148.40 148.40 150.25 150.40 151.80 152.10 151.40	(*) (*) \$155.95 155.35 155.55 154.50 154.45 (*) (*) 157.65 157.35 158.25 158.45 158.30 (*) (*) 160.70 160.80 162.10 160.60 161.70 (*) (*)	\$163.00 162.00 164.75 166.40 (*) (*) 166.90 (*) 168.00 167.40 168.45 (*) (*) 165.70 163.15 160.75 159.15 161.35 (*) (*)	\$160.80 159.25 (*) (*) 160.00 160.35 160.80 161.40 159.05 (*) (*) 159.30 158.10 160.60 159.35 160.50 (*) (*)
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24	\$143.05 (*) (*) (*) 141.75 141.05 141.95 142.55 (*) (*) 141.40 142.30 143.30 144.35 145.10 (*) (*) 144.05 146.00 145.40 144.50 145.20 (*) (*)	\$144.70 146.30 146.50 147.25 145.95 (*) (*) 146.30 147.00 146.35 145.85 145.40 (*) (*) 144.65 143.80 144.20 144.05 145.00 (*) (*) (*) 144.60 143.90 144.75	\$145.93 146.90 (*) (*) (*) 147.80 148.15 148.00 147.95 (*) (*) 148.80 148.40 148.40 148.40 148.80 (*) (*) (*) 150.25 150.40 151.80 152.10 151.40 (*)	(*) (*) \$155.95 155.35 155.55 154.50 154.45 (*) (*) 157.65 157.35 158.25 158.45 158.30 (*) (*) (6) 160.70 160.80 162.10 160.60 161.70 (*) (*) (*) 163.75	\$163.00 162.00 164.75 166.40 (*) (*) 166.90 (*) 168.00 167.40 168.45 (*) (*) 165.70 163.15 160.75 159.15 161.35 (*) (*)	\$160.80 159.25 (*) (*) 160.00 160.35 160.80 161.40 159.05 (*) (*) 159.30 158.10 160.60 159.35 160.50 (*) (*) (*) (*)
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24	\$143.05 (*) (*) (*) 141.75 141.05 141.95 142.55 (*) (*) 141.40 142.30 143.30 144.35 145.10 (*) (*) 144.05 146.00 145.40 144.50 145.20 (*) (*) 146.90	\$144.70 146.30 146.50 147.25 145.95 (*) (*) 146.30 147.00 146.35 145.85 145.40 (*) (*) 144.65 143.80 144.20 144.05 145.00 (*) (*) (*)	\$145.93 146.90 (*) (*) (*) 147.80 148.15 148.00 147.95 (*) (*) 148.80 148.40 148.40 148.40 148.80 (*) (*) (*) 150.25 150.40 151.80 152.10 151.40 (*) (*)	(*) (*) \$155.95 155.35 155.55 154.50 154.45 (*) (*) 157.65 157.35 158.25 158.45 158.30 (*) (*) 160.70 160.80 162.10 160.60 161.70 (*) (*) (*) 163.75 163.35	\$163.00 162.00 164.75 166.40 (*) (*) 166.90 (*) 168.00 167.40 168.45 (*) (*) 165.70 163.15 160.75 159.15 161.35 (*) (*) (*)	\$160.80 159.25 (*) (*) 160.00 160.35 160.80 161.40 159.05 (*) (*) 159.30 158.10 160.60 159.35 160.50 (*) (*) (*) (*) 160.60 160.80 159.90 (*)
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26	\$143.05 (*) (*) (*) 141.75 141.05 141.95 142.55 (*) (*) 141.40 142.30 143.30 144.35 145.10 (*) (*) 144.05 146.00 145.40 144.50 145.20 (*) (*) 146.90 146.15	\$144.70 146.30 146.50 147.25 145.95 (*) (*) 146.30 147.00 146.35 145.85 145.40 (*) (*) 144.65 143.80 144.20 144.05 145.00 (*) (*) (*) 144.60 143.90 144.75 145.50	\$145.93 146.90 (*) (*) (*) (*) 147.80 148.15 148.00 147.95 (*) (*) 148.80 148.40 148.40 148.40 148.80 (*) (*) (*) 150.25 150.40 151.80 152.10 151.40 (*) (*)	(*) (*) \$155.95 155.35 155.55 154.50 154.45 (*) (*) 157.65 157.35 158.25 158.45 158.30 (*) (*) (*) 160.70 160.80 162.10 160.60 161.70 (*) (*) (*) 163.75 163.35 163.40	\$163.00 162.00 164.75 166.40 (*) (*) 168.00 167.40 168.45 (*) (*) 165.70 163.15 160.75 159.15 161.35 (*) (*) (*) 158.20 156.65 159.80 (*) (*)	\$160.80 159.25 (*) (*) 160.00 160.35 160.80 161.40 159.05 (*) (*) 159.30 158.10 160.60 159.35 160.50 (*) (*) (*) 160.60 160.80 159.90 (*) (*)
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24	\$143.05 (*) (*) (*) 141.75 141.05 141.95 142.55 (*) (*) 141.40 142.30 143.30 144.35 145.10 (*) (*) 144.05 146.00 145.40 144.50 145.20 (*) (*) 146.90	\$144.70 146.30 146.50 147.25 145.95 (*) (*) 146.30 147.00 146.35 145.85 145.40 (*) (*) 144.65 143.80 144.20 144.05 145.00 (*) (*) (*)	\$145.93 146.90 (*) (*) (*) 147.80 148.15 148.00 147.95 (*) (*) 148.80 148.40 148.40 148.40 148.80 (*) (*) (*) 150.25 150.40 151.80 152.10 151.40 (*) (*)	(*) (*) \$155.95 155.35 155.55 154.50 154.45 (*) (*) 157.65 157.35 158.25 158.45 158.30 (*) (*) 160.70 160.80 162.10 160.60 161.70 (*) (*) (*) 163.75 163.35	\$163.00 162.00 164.75 166.40 (*) (*) 166.90 (*) 168.00 167.40 168.45 (*) (*) 165.70 163.15 160.75 159.15 161.35 (*) (*) (*)	\$160.80 159.25 (*) (*) 160.00 160.35 160.80 161.40 159.05 (*) (*) 159.30 158.10 160.60 159.35 160.50 (*) (*) (*) (*) 160.60 160.80 159.90 (*)
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27	\$143.05 (*) (*) (*) 141.75 141.05 141.95 142.55 (*) (*) 141.40 142.30 143.30 144.35 145.10 (*) (*) 144.05 146.00 145.40 144.50 145.20 (*) (*) 146.90 146.15 146.30	\$144.70 146.30 146.50 147.25 145.95 (*) (*) 146.30 147.00 146.35 145.85 145.40 (*) (*) 144.65 143.80 144.20 144.05 145.00 (*) (*) 144.60 143.90 144.75 144.70 145.50 (*)	\$145.93 146.90 (*) (*) (*) (*) 147.80 148.15 148.00 147.95 (*) (*) 148.80 148.40 148.40 148.40 148.80 (*) (*) (*) 150.25 150.40 151.80 152.10 151.40 (*) (*)	(*) (*) \$155.95 155.35 155.55 154.50 154.45 (*) (*) 157.65 157.35 158.25 158.45 158.30 (*) (*) 160.70 160.80 162.10 160.60 161.70 (*) (*) (*) 163.75 163.35 163.40 160.65	\$163.00 162.00 164.75 166.40 (*) (*) 166.90 (*) 168.00 167.40 168.45 (*) (*) 165.70 163.15 160.75 159.15 161.35 (*) (*) 158.20 156.65 159.80 (*) (*) (*) (*)	\$160.80 159.25 (*) (*) 160.00 160.35 160.80 161.40 159.05 (*) (*) 159.30 158.10 160.60 159.35 160.50 (*) (*) (*) (*) 160.60 160.80 159.90 (*) (*)
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28	\$143.05 (*) (*) (*) (*) 141.75 141.05 141.95 142.55 (*) (*) 141.40 142.30 143.30 144.35 145.10 (*) (*) (*) 144.05 146.00 145.40 144.50 145.20 (*) (*) (*) 146.90 146.15 146.30 144.85	\$144.70 146.30 146.50 147.25 145.95 (*) (*) 146.30 147.00 146.35 145.85 145.40 (*) (*) 144.65 143.80 144.20 144.05 145.00 (*) (*) (*) 144.60 143.90 144.75 144.70 145.50 (*) (*) (*)	\$145.93 146.90 (*) (*) (*) (*) 147.80 148.15 148.00 147.95 (*) (*) 148.80 148.40 148.40 148.40 148.40 150.25 150.40 151.80 152.10 151.40 (*) (*) (*)	(*) (*) (*) \$155.95 155.35 155.55 154.50 154.45 (*) (*) 157.65 157.35 158.25 158.45 158.30 (*) (*) (*) 160.70 160.80 162.10 160.60 161.70 (*) (*) (*) 163.75 163.35 163.40 160.65 161.70 (*) (*) (*) (*)	\$163.00 162.00 164.75 166.40 (*) (*) 166.90 (*) 168.00 167.40 168.45 (*) (*) 165.70 163.15 160.75 159.15 161.35 (*) (*) 158.20 156.65 159.80 (*) (*) (*) (*) 162.10 159.70 160.55	\$160.80 159.25 (*) (*) 160.00 160.35 160.80 161.40 159.05 (*) (*) 159.30 158.10 160.60 159.35 160.50 (*) (*) (*) (*) 160.60 160.8
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29	\$143.05 (*) (*) (*) (*) 141.75 141.05 141.95 142.55 (*) (*) 141.40 142.30 143.30 144.35 145.10 (*) (*) (*) 144.05 146.00 145.40 144.50 145.20 (*) (*) 146.90 146.15 146.30 144.85 144.60	\$144.70 146.30 146.50 147.25 145.95 (*) (*) 146.30 147.00 146.35 145.85 145.40 (*) (*) 144.65 143.80 144.20 144.05 145.00 (*) (*) (*) 144.60 143.90 144.75 144.70 145.50 (*) (*) (*) (*) 146.70 146.65	\$145.93 146.90 (*) (*) (*) (*) 147.80 148.15 148.00 147.95 (*) (*) 148.80 148.40 148.40 148.40 148.40 150.25 150.25 150.40 151.80 152.10 151.40 (*) (*) (*)	(*) (*) (*) \$155.95 155.35 155.55 154.50 154.45 (*) (*) 157.65 157.35 158.25 158.45 158.30 (*) (*) (*) 160.70 160.80 162.10 160.60 161.70 (*) (*) (*) 163.75 163.35 163.40 160.65 161.70 (*) (*) (*) (*)	\$163.00 162.00 164.75 166.40 (*) (*) 166.90 (*) 168.00 167.40 168.45 (*) (*) 165.70 163.15 160.75 159.15 161.35 (*) (*) 158.20 156.65 159.80 (*) (*) (*) (*) 162.10 159.70	\$160.80 159.25 (*) (*) 160.00 160.35 160.80 161.40 159.05 (*) (*) 159.30 158.10 160.60 159.35 160.50 (*) (*) (*) (*) 160.60 160.80

¹ Selling prices for 100-ounce bars 99.95 percent fine or better in lots of 1,000 ounces.

^{*} Market closed.

Daily market prices for industrial gold in the United States, quoted by Engelhard Minerals & Chemicals Corp., New York, N.Y., for 1978¹

Day	January	February	March	April	May	June
1 m. r	(*)	\$176.90	\$183.00	(*)	\$169.85	\$183.30
2	(*)	175.35	184.75	(*)	169.40	185.05
3	\$169.70	175.75	183.95	\$183.90	170.95	(*)
4	172.35	(*)	(*)	181.00		(*)
5	166.20	(*)	(*)	178.90		183.40
6	170.40	176.10		181.50	(/	181.35
7	(*)	(*)	186.75	179.60	` '	183.25
8	(*)	175.20		(*)	172.70	182.90
9	170.75 173.60	173.35 175.10		(*) 179.20	173.20 174.45	181.60
11	173.65	(*)	(*)	180.10		(*) (*)
12	174.05	(*)	(*)	180.50		180.85
13	172.95	177.50		179.10		182.65
14	(*)	177.90		179.00	(*)	184.00
15	(*)	179.10	186.85	(*)	175.75	182.45
16	175.40	179.85		(*)	176.30	184.90
17	173.45	179.95	183.70	174.80	178.00	(*)
18	172.45	(*)	(*)	174.00	178.40	(*)
19	173.95	(*)	(*)	175.15	179.30	184.90
20	(*)	(*) 181.95	181.50 177.80	169.05 171.40	(*)	186.80
21	(*) (*)	181.65	177.80	(*)	(*) 179.70	186.65 185.60
23	175.70	183.70	179.80	(*)	180.25	185.85
24	176.95	181.25	(*)	169.00	179.90	(*)
25	178.00	(*)	(*)	168.15	179.10	(*)
26	176.30	(*)	(*)	169.40	179.95	185.55
27	176.90	181.30	181.75	170.40	(*)	184.55
28	(*)	182.75	184.30	171.35	(*)	185.65
29	\ /		181.90	(*)	(*)	184.60
30			180.25	(*)	182.80	183.35
31						• • • • • • • • •
Day						
Day	July					December
1	(*)	\$205.40	\$208.30	(*)	\$227.80	\$194.95
12	(*)	\$205.40 203.55	\$208.30 (*)	(*) \$217.40	\$227.80 221.80	\$194.95 (*)
1	(*) (*) \$183.55	\$205.40 203.55 202.50	\$208.30 (*) (*)	(*) \$217.40 221.70	\$227.80 221.80 215.50	\$194.95 (*) (*)
12	(*)	\$205.40 203.55 202.50 201.85	\$208.30 (*)	(*) \$217.40	\$227.80 221.80 215.50 (*)	\$194.95 (*)
1	(*) (*) \$183.55 (*)	\$205.40 203.55 202.50	\$208.30 (*) (*) (*)	(*) \$217.40 221.70 223.80	\$227.80 221.80 215.50	\$194.95 (*) (*) 199.55
1	(*) (*) \$183.55 (*) 184.50	\$205.40 203.55 202.50 201.85 (*)	\$208.30 (*) (*) (*) (*) 209.75	(*) \$217.40 221.70 223.80 223.00	\$227.80 221.80 215.50 (*) (*)	\$194.95 (*) (*) 199.55 196.70
1	(*) (*) \$183.55 (*) 184.50 183.05 184.25 (*)	\$205.40 203.55 202.50 201.85 (*) (*) 204.35 207.25	\$208.30 (*) (*) (*) 209.75 212.30 210.80 206.20	(*) \$217.40 221.70 223.80 223.00 223.40 (*) (*)	\$227.80 221.80 215.50 (*) (*) 210.35 (*) 219.10	\$194.95 (*) (*) 199.55 196.70 196.55 198.60 202.30
1	(*) (*) \$183.55 (*) 184.50 183.05 184.25 (*) (*)	\$205.40 203.55 202.50 201.85 (*) (*) 204.35 207.25 208.25	\$208.30 (*) (*) (*) 209.75 212.30 210.80 206.20 (*)	(*) \$217.40 221.70 223.80 223.00 223.40 (*) (*) 222.75	\$227.80 221.80 215.50 (*) (*) 210.35 (*) 219.10 214.00	\$194.95 (*) (*) 199.55 196.70 196.55 198.60 202.30 (*)
1	(*) (*) \$183.55 (*) 184.50 183.05 184.25 (*) (*) 186.35	\$205.40 203.55 202.50 201.85 (*) (*) 204.35 207.25 208.25 206.80	\$208.30 (*) (*) (*) 209.75 212.30 210.80 206.20 (*) (*)	(*) \$217.40 221.70 223.80 223.40 (*) (*) 222.75 225.60	\$227.80 221.80 215.50 (*) (*) 210.35 (*) 219.10 214.00 206.55	\$194.95 (*) (*) 199.55 196.70 196.55 198.60 202.30 (*) (*)
1	(*) (*) \$183.55 (*) 184.50 183.05 184.25 (*) (*) 186.35 185.80	\$205.40 203.55 202.50 201.85 (*) (*) 204.35 207.25 208.25 206.80 211.45	\$208.30 (*) (*) (*) 209.75 212.30 210.80 206.20 (*) (*) 205.95	(*) \$217.40 221.70 223.80 223.00 223.40 (*) (*) 222.75 225.60 226.60	\$227.80 221.80 215.50 (*) (*) 210.35 (*) 219.10 214.00 206.55 (*)	\$194.95 (*) (*) 199.55 196.70 196.55 198.60 202.30 (*) (*)
1	(*) (*) \$183.55 (*) 184.50 183.05 184.25 (*) (*) 186.35 185.80 186.60	\$205.40 203.55 202.50 201.85 (*) (*) 204.35 207.25 208.25 206.80 211.45 (*)	\$208.30 (*) (*) (*) 209.75 212.30 210.80 206.20 (*) (*) 205.95 208.30	(*) \$217.40 221.70 223.80 223.00 223.40 (*) (*) 222.75 225.60 226.60 225.85	\$227.80 221.80 215.50 (*) (*) 210.35 (*) 219.10 214.00 206.55 (*) (*)	\$194.95 (*) (*) 199.55 196.70 196.55 198.60 202.30 (*) (*) 207.30 202.20
1 2 3 4 5 6 7 8 9 10 11 12 12 13	(*) (*) \$183.55 (*) 184.50 183.05 184.25 (*) (*) 186.35 185.80 186.60 187.00	\$205.40 203.55 202.50 201.85 (*) (*) 204.35 207.25 208.25 206.80 211.45 (*) (*)	\$208.30 (*) (*) (*) (*) 209.75 212.30 210.80 206.20 (*) (*) 205.95 208.30 210.00	(*) \$217.40 221.70 223.80 223.00 223.40 (*) (*) 222.75 225.60 226.60 225.85 224.80	\$227.80 221.80 215.50 (*) (*) 210.35 (*) 219.10 214.00 206.55 (*) (*) 208.40	\$194.95 (*) (*) 199.55 196.70 196.55 198.60 202.30 (*) (*) 207.30 202.20 203.15
1	(*) (*) \$183.55 (*) 184.50 183.05 184.25 (*) (*) 186.35 185.80 186.60 187.00 186.30	\$205.40 203.55 202.50 201.85 (*) (*) 204.35 207.25 208.25 206.80 211.45 (*)	\$208.30 (*) (*) (*) 209.75 212.30 210.80 206.20 (*) (*) 205.95 208.30	(*) \$217.40 221.70 223.80 223.00 223.40 (*) (*) 222.75 225.60 226.60 225.85 224.80 (*)	\$227.80 221.80 215.50 (*) (*) 210.35 (*) 219.10 214.00 206.55 (*) (*)	\$194.95 (*) (*) 199.55 196.70 196.55 198.60 202.30 (*) (*) 207.30 202.20
1 2 3 4 5 6 7 8 9 10 11 12 12 13 14	(*) (*) \$183.55 (*) 184.50 183.05 184.25 (*) (*) 186.35 185.80 186.60 187.00	\$205.40 203.55 202.50 201.85 (*) (*) 204.35 207.25 208.25 206.80 211.45 (*) (*)	\$208.30 (*) (*) (*) (*) 209.75 212.30 210.80 206.20 (*) (*) 205.95 208.30 210.00 209.55 212.45	(*) \$217.40 221.70 223.80 223.00 223.40 (*) (*) 222.75 225.60 226.60 225.85 224.80	\$227.80 221.80 215.50 (*) (*) 210.35 (*) 219.10 214.00 206.55 (*) (*) 208.40 211.30	\$194.95 (*) (*) 199.55 196.70 196.55 198.60 202.30 (*) 207.30 202.20 203.15 204.30 205.90
1 2 3 4 5 6 7 8 9 10 11 12 12 13 14 15	(*) (*) (*) \$183.55 (*) 184.50 183.05 184.25 (*) (*) 186.35 185.80 186.60 187.00 186.30 (*)	\$205.40 203.55 202.50 201.85 (*) (*) 204.35 207.25 208.25 206.80 211.45 (*) (*) 213.80 213.50	\$208.30 (*) (*) (*) (*) 209.75 212.30 210.80 206.20 (*) (*) 205.95 208.30 210.00 209.55	(*) \$217.40 221.70 223.80 223.00 223.40 (*) (*) 222.75 225.60 226.60 225.85 224.80 (*) (*)	\$227.80 221.80 215.50 (*) (*) 210.35 (*) 219.10 214.00 206.55 (*) (*) 208.40 211.30 204.45	\$194.95 (*) (*) 199.55 196.70 196.55 198.60 202.30 (*) (*) 207.30 202.20 203.15 204.30
1 2 3 4 5 6 7 8 9 10 11 12 12 13 14 15 16	(*) (*) (*) \$183.55 (*) 184.50 183.05 184.25 (*) (*) 186.35 185.80 186.60 187.00 186.30 (*) (*) (*) 185.35 185.15	\$205.40 203.55 202.50 201.85 (*) (*) 204.35 207.25 208.25 206.80 211.45 (*) (*) 213.80 213.50 216.05 209.30 212.05	\$208.30 (*) (*) (*) (*) 209.75 212.30 210.80 206.20 (*) (*) 205.95 208.30 210.00 209.55 212.45 (*) (*) 210.30	(*) \$217.40 221.70 223.80 223.00 223.40 (*) (*) 222.75 225.60 226.60 225.85 224.80 (*) (*) (*) 223.70 228.05 229.30	\$227.80 221.80 215.50 (*) (*) 210.35 (*) 219.10 214.00 206.55 (*) (*) 208.40 211.30 204.45 196.60 198.25 (*)	\$194.95 (*) (*) 199.55 196.70 196.55 198.60 202.30 (*) (*) 207.30 202.20 203.15 204.30 205.90 (*) (*) (*) 213.20
1 2 3 4 5 5 6 7 8 9 10 11 12 13 14 15 15 16 17 7 18 19 19	(*) (*) (*) \$183.55 (*) 184.50 183.05 184.25 (*) (*) 186.35 185.80 186.60 187.00 186.30 (*) (*) (*) 185.35 185.15 186.00	\$205.40 203.55 202.50 201.85 (*) (*) 204.35 207.25 208.25 206.80 211.45 (*) (*) 213.80 213.50 216.05 209.30 212.05 (*)	\$208.30 (*) (*) (*) 209.75 212.30 210.80 206.20 (*) (*) 205.95 208.30 210.00 209.55 212.45 (*) (*) 210.30 211.75	(*) \$217.40 221.70 223.80 223.00 223.40 (*) (*) 222.75 225.60 226.60 225.85 224.80 (*) (*) (*) 223.70 228.05 229.30 229.95	\$227.80 221.80 215.50 (*) (*) 210.35 (*) 219.10 214.00 206.55 (*) (*) 208.40 211.30 204.45 196.60 198.25 (*) (*)	\$194.95 (*) (*) 199.55 196.70 196.55 198.60 202.30 (*) (*) 207.30 202.20 203.15 204.30 205.90 (*) (*) (*) 213.20 216.60
1 2 3 4 5 5 6 7 8 9 10 11 12 13 14 15 15 16 17 7 18 19 20	(*) (*) (*) \$183.55 (*) 184.50 183.05 184.25 (*) (*) 186.35 185.80 186.60 187.00 186.30 (*) (*) (*) 185.35 185.15 186.00 188.70	\$205.40 203.55 202.50 201.85 (*) (*) 204.35 207.25 208.25 206.80 211.45 (*) (*) 213.80 213.50 216.05 209.30 212.05 (*)	\$208.30 (*) (*) (*) 209.75 212.30 210.80 206.20 (*) (*) 205.95 208.30 210.00 209.55 212.45 (*) (*) 210.30 211.75 213.90	(*) \$217.40 221.70 223.80 223.00 223.40 (*) (*) 222.75 225.60 226.60 225.85 224.80 (*) (*) 223.70 228.05 229.30 229.95 228.25	\$227.80 221.80 215.50 (*) (*) 210.35 (*) 219.10 214.00 206.55 (*) (*) 208.40 211.30 204.45 196.60 198.25 (*) (*)	\$194.95 (*) (*) 199.55 196.70 196.55 198.60 202.30 (*) (*) 207.30 202.20 203.15 204.30 205.90 (*) (*) (*) 213.20 216.60 216.90
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 7 18 19 20 21	(*) (*) (*) \$183.55 (*) 184.50 183.05 184.25 (*) (*) 186.35 185.80 186.60 187.00 186.30 (*) (*) (*) 185.35 185.15 186.00 188.70 192.05	\$205.40 203.55 202.50 201.85 (*) (*) 204.35 207.25 208.25 206.80 211.45 (*) (*) 213.80 213.50 216.05 209.30 212.05 (*) (*)	\$208.30 (*) (*) (*) 209.75 212.30 210.80 206.20 (*) (*) 205.95 208.30 210.00 209.55 212.45 (*) (*) 210.30 211.75 213.90 215.95	(*) \$217.40 221.70 223.80 223.00 223.40 (*) (*) 222.75 225.60 226.60 225.85 224.80 (*) (*) 223.70 228.05 229.30 229.95 228.25 (*)	\$227.80 221.80 215.50 (*) (*) 210.35 (*) 219.10 214.00 206.55 (*) (*) 208.40 211.30 204.45 196.60 198.25 (*) (*)	\$194.95 (*) (*) 199.55 196.70 196.55 198.60 202.30 (*) (*) 207.30 202.20 203.15 204.30 205.90 (*) (*) (*) 213.20 216.60 216.90 212.90
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	(*) (*) (*) \$183.55 (*) 184.50 183.05 184.25 (*) (*) 186.35 185.80 186.60 187.00 186.30 (*) (*) (*) 185.35 185.15 186.00 188.70 192.05 (*)	\$205.40 203.55 202.50 201.85 (*) (*) 204.35 207.25 208.25 206.80 211.45 (*) (*) 213.80 213.50 216.05 209.30 212.05 (*) (*)	\$208.30 (*) (*) (*) 209.75 212.30 210.80 206.20 (*) (*) 205.95 208.30 210.00 209.55 212.45 (*) (*) 210.30 211.75 213.90 215.95 214.65	(*) \$217.40 221.70 223.80 223.00 223.40 (*) (*) 222.75 225.60 226.60 225.85 224.80 (*) (*) 223.70 228.05 229.30 229.95 228.25 (*) (*)	\$227.80 221.80 215.50 (*) (*) 210.35 (*) 219.10 214.00 206.55 (*) (*) 208.40 211.30 204.45 196.60 198.25 (*) (*)	\$194.95 (*) (*) 199.55 196.70 196.55 198.60 202.30 (*) (*) 207.30 202.20 203.15 204.30 205.90 (*) (*) (*) 213.20 216.60 216.90 212.90 215.40
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 7 18 19 20 21 22 23	(*) (*) (*) \$183.55 (*) 184.50 183.05 184.25 (*) (*) 186.35 185.80 186.60 187.00 186.30 (*) (*) (*) 185.35 185.15 186.00 188.70 192.05 (*) (*) (*)	\$205.40 203.55 202.50 201.85 (*) (*) 204.35 207.25 208.25 206.80 211.45 (*) (*) 213.80 213.50 216.05 209.30 212.05 (*) (*) 205.20 207.70 200.50	\$208.30 (*) (*) (*) (*) 209.75 212.30 210.80 206.20 (*) (*) 205.95 208.30 210.00 209.55 212.45 (*) (*) 210.30 211.75 213.90 215.95 214.65 (*)	(*) \$217.40 221.70 223.80 223.00 223.40 (*) (*) 222.75 225.60 226.60 225.85 224.80 (*) (*) (*) 223.70 228.05 229.30 229.95 228.25 (*) (*) (*) 227.05	\$227.80 221.80 215.50 (*) (*) 210.35 (*) 219.10 214.00 206.55 (*) (*) 208.40 211.30 204.45 196.60 198.25 (*) (*) 199.15 200.50 199.30 (*)	\$194.95 (*) (*) 199.55 196.70 196.55 198.60 202.30 (*) (*) 207.30 202.20 203.15 204.30 205.90 (*) (*) (*) 213.20 216.60 216.90 212.90 215.40 (*)
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 7 18 19 20 21 22 23 24	(*) (*) (*) \$183.55 (*) 184.50 183.05 184.25 (*) (*) 186.35 185.80 186.60 187.00 186.30 (*) (*) (*) 185.35 185.15 186.00 188.70 192.05 (*) (*) (*) 195.50	\$205.40 203.55 202.50 201.85 (*) (*) 204.35 207.25 208.25 206.80 211.45 (*) (*) 213.80 213.50 216.05 209.30 212.05 (*) (*) 205.20 207.70 200.50 203.30	\$208.30 (*) (*) (*) (*) 209.75 212.30 210.80 206.20 (*) (*) 205.95 208.30 210.00 209.55 212.45 (*) (*) 210.30 211.75 213.90 215.95 214.65 (*) (*) (*)	(*) \$217.40 221.70 223.80 223.00 223.40 (*) (*) 222.75 225.60 226.60 225.85 224.80 (*) (*) 223.70 228.05 229.30 229.95 228.25 (*) (*) 227.05 226.10	\$227.80 221.80 221.80 215.50 (*) (*) 210.35 (*) 219.10 214.00 206.55 (*) (*) 208.40 211.30 204.45 196.60 198.25 (*) (*) 199.15 200.50 199.30 (*) (*)	\$194.95 (*) (*) 199.55 196.70 196.55 198.60 202.30 (*) (*) 207.30 202.20 203.15 204.30 205.90 (*) (*) (*) 213.20 216.60 216.90 212.90 215.40 (*) (*) (*)
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 7 18 19 20 21 22 23 24 25	(*) (*) (*) \$183.55 (*) 184.50 183.05 184.25 (*) (*) 186.35 185.80 186.60 187.00 186.30 (*) (*) (*) 185.35 185.15 186.00 188.70 192.05 (*) (*) (*) 195.50 193.60	\$205.40 203.55 202.50 201.85 (*) (*) 204.35 207.25 208.25 206.80 211.45 (*) (*) 213.80 213.50 216.05 209.30 212.05 (*) (*) 205.20 207.70 200.50 203.30 198.30	\$208.30 (*) (*) (*) (*) 209.75 212.30 210.80 206.20 (*) (*) 205.95 208.30 210.00 209.55 212.45 (*) (*) 210.30 211.75 213.90 215.95 214.65 (*) (*) 218.70	(*) \$217.40 221.70 223.80 223.00 223.40 (*) (*) 222.75 225.60 226.60 225.85 224.80 (*) (*) (*) 223.70 228.05 229.30 229.95 228.25 (*) (*) 227.05 226.10 231.20	\$227.80 221.80 221.80 215.50 (*) (*) 210.35 (*) 219.10 214.00 206.55 (*) (*) 208.40 211.30 204.45 196.60 198.25 (*) (*) 199.15 200.50 199.30 (*) (*) (*)	\$194.95 (*) (*) 199.55 196.70 196.55 198.60 202.30 (*) (*) 207.30 202.20 203.15 204.30 205.90 (*) (*) (*) 213.20 216.60 216.90 212.90 215.40 (*) (*) (*)
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 7 18 19 20 21 22 23 24	(*) (*) (*) \$183.55 (*) 184.50 183.05 184.25 (*) (*) 186.35 185.80 186.60 187.00 186.30 (*) (*) (*) 185.35 185.15 186.00 188.70 192.05 (*) (*) (*) 195.50	\$205.40 203.55 202.50 201.85 (*) (*) 204.35 207.25 208.25 206.80 211.45 (*) (*) 213.80 213.50 216.05 209.30 212.05 (*) (*) 205.20 207.70 200.50 203.30 198.30 (*)	\$208.30 (*) (*) (*) (*) 209.75 212.30 210.80 206.20 (*) (*) 205.95 208.30 210.00 209.55 212.45 (*) (*) 210.30 211.75 213.90 215.95 214.65 (*) (*) (*)	(*) \$217.40 221.70 223.80 223.00 223.40 (*) (*) 222.75 225.60 226.60 225.85 224.80 (*) (*) 223.70 228.05 229.30 229.95 228.25 (*) (*) 227.05 226.10	\$227.80 221.80 221.80 215.50 (*) (*) 210.35 (*) 219.10 214.00 206.55 (*) (*) 208.40 211.30 204.45 196.60 198.25 (*) (*) 199.15 200.50 199.30 (*) (*)	\$194.95 (*) (*) 199.55 196.70 196.55 198.60 202.30 (*) (*) 207.30 202.20 203.15 204.30 205.90 (*) (*) (*) 213.20 216.60 216.90 212.90 215.40 (*) (*) (*)
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 7 18 19 20 21 22 23 24 25 26 5 5 26 5 5 5 6	(*) (*) (*) \$183.55 (*) 184.50 183.05 184.25 (*) (*) 186.35 185.80 186.60 187.00 186.30 (*) (*) (*) 185.35 185.15 186.00 188.70 192.05 (*) (*) (*) 195.50 193.60 194.60	\$205.40 203.55 202.50 201.85 (*) (*) 204.35 207.25 208.25 206.80 211.45 (*) (*) 213.80 213.50 216.05 209.30 212.05 (*) (*) 205.20 207.70 200.50 203.30 198.30	\$208.30 (*) (*) (*) (*) 209.75 212.30 210.80 206.20 (*) (*) 205.95 208.30 210.00 209.55 212.45 (*) (*) 210.30 211.75 213.90 215.95 214.65 (*) (*) 218.70 218.55	(*) \$217.40 221.70 223.80 223.00 223.40 (*) (*) 222.75 225.60 226.60 225.85 224.80 (*) (*) 223.70 228.05 229.30 229.95 228.25 (*) (*) 227.05 226.10 231.20 234.00 234.80 (*)	\$227.80 221.80 221.80 215.50 (*) (*) 210.35 (*) 219.10 214.00 206.55 (*) (*) 208.40 211.30 204.45 196.60 198.25 (*) (*) 199.15 200.50 199.30 (*) (*) (*) (*) 198.70 196.45	\$194.95 (*) (*) 199.55 196.70 196.55 198.60 202.30 (*) (*) 207.30 202.20 203.15 204.30 205.90 (*) (*) (*) 213.20 216.60 216.90 212.90 215.40 (*) (*) (*) (*)
1 2 3 4 5 6 7 8 9 10 11 12 12 13 14 15 16 17 7 18 19 20 21 22 23 24 25 26 27	(*) (*) (*) \$183.55 (*) 184.50 183.05 184.25 (*) (*) 186.35 185.80 186.60 187.00 186.30 (*) (*) (*) 185.35 185.15 186.00 188.70 192.05 (*) (*) (*) 195.50 193.60 194.60 194.35	\$205.40 203.55 202.50 201.85 (*) (*) 204.35 207.25 208.25 206.80 211.45 (*) (*) 213.80 213.50 216.05 209.30 212.05 (*) (*) 205.20 207.70 200.50 203.30 198.30 (*) (*)	\$208.30 (*) (*) (*) (*) 209.75 212.30 210.80 206.20 (*) (*) 205.95 208.30 210.00 209.55 212.45 (*) (*) 210.30 211.75 213.90 215.95 214.65 (*) (*) 218.70 218.55 215.10 218.20 217.40	(*) \$217.40 221.70 223.80 223.00 223.40 (*) (*) 222.75 225.60 226.60 225.85 224.80 (*) (*) 223.70 228.05 229.30 229.95 228.25 (*) (*) 227.05 226.10 231.20 234.00 234.80	\$227.80 221.80 221.80 215.50 (*) (*) 210.35 (*) 219.10 214.00 206.55 (*) (*) 208.40 211.30 204.45 196.60 198.25 (*) (*) 199.15 200.50 199.30 (*) (*) (*) (*) 198.70 196.45 195.90	\$194.95 (*) (*) 199.55 196.70 196.55 198.60 202.30 (*) (*) 207.30 202.20 203.15 204.30 205.90 (*) (*) (*) 213.20 216.60 216.90 212.90 215.40 (*) (*) (*) (*) (*) (*) (*) (*) (*) (*)
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 7 18 19 20 21 22 23 24 25 26 27 28	(*) (*) (*) \$183.55 (*) 184.50 183.05 184.25 (*) (*) 186.35 185.80 186.60 187.00 186.30 (*) (*) (*) 185.35 185.15 186.00 188.70 192.05 (*) (*) (*) 195.50 193.60 194.60 194.35 201.60 (*) (*) (*)	\$205.40 203.55 202.50 201.85 (*) (*) 204.35 207.25 208.25 206.80 211.45 (*) (*) 213.80 213.50 216.05 209.30 212.05 (*) (*) 205.20 207.70 200.50 203.30 198.30 (*) (*) (*)	\$208.30 (*) (*) (*) (*) 209.75 212.30 210.80 206.20 (*) (*) 205.95 208.30 210.00 209.55 212.45 (*) (*) 210.30 211.75 213.90 215.95 214.65 (*) (*) (*) 218.70 218.55 215.10 218.20 217.40 (*)	(*) \$217.40 221.70 223.80 223.00 223.40 (*) (*) 222.75 225.60 226.60 225.85 224.80 (*) (*) 223.70 228.05 229.30 229.95 228.25 (*) (*) 227.05 226.10 231.20 234.00 234.80 (*) (*) (*) 243.05	\$227.80 221.80 221.80 215.50 (*) (*) 210.35 (*) 219.10 214.00 206.55 (*) (*) 208.40 211.30 204.45 196.60 198.25 (*) (*) 199.15 200.50 199.30 (*) (*) (*) (*) 198.70 196.45 195.90 193.70	\$194.95 (*) (*) 199.55 196.70 196.55 198.60 202.30 (*) (*) (*) 207.30 202.20 203.15 204.30 205.90 (*) (*) (*) 213.20 216.60 216.90 212.90 215.40 (*) (*) (*) (*) (*) (*) (*) (*) (*) (*)
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 7 18 19 20 21 22 23 24 25 26 27 28 29	(*) (*) (*) \$183.55 (*) 184.50 183.05 184.25 (*) (*) 186.35 185.80 186.60 187.00 186.30 (*) (*) (*) 185.35 185.15 186.00 188.70 192.05 (*) (*) (*) 195.50 193.60 194.60 194.35 201.60 (*)	\$205.40 203.55 202.50 201.85 (*) (*) 204.35 207.25 208.25 206.80 211.45 (*) (*) 213.80 213.50 216.05 209.30 212.05 (*) (*) 205.20 207.70 200.50 203.30 198.30 (*) (*) (*)	\$208.30 (*) (*) (*) (*) 209.75 212.30 210.80 206.20 (*) (*) 205.95 208.30 210.00 209.55 212.45 (*) (*) 210.30 211.75 213.90 215.95 214.65 (*) (*) (*) 218.70 218.55 215.10 218.20 217.40	(*) \$217.40 221.70 223.80 223.00 223.40 (*) (*) 222.75 225.60 226.60 225.85 224.80 (*) (*) 223.70 228.05 229.30 229.95 228.25 (*) (*) 227.05 226.10 231.20 234.00 234.80 (*) (*) (*) 243.05	\$227.80 221.80 221.80 215.50 (*) (*) 210.35 (*) 219.10 214.00 206.55 (*) (*) 208.40 211.30 204.45 196.60 198.25 (*) (*) 199.15 200.50 199.30 (*) (*) (*) (*) 198.70 196.45 195.90	\$194.95 (*) (*) 199.55 196.70 196.55 198.60 202.30 (*) (*) 207.30 202.20 203.15 204.30 205.90 (*) (*) (*) 213.20 216.60 216.90 212.90 215.40 (*) (*) (*) (*) (*) (*) 220.80 220.95 226.30

¹ Selling prices for 100-ounce bars 99.95 percent fine or better in lots of 1,000 ounces.

^{*} Market closed.

Silver

The New York market prices of silver during the calendar years 1977 and 1978 are contained in the first two of the three tables that follow. The price, as published daily by Handy & Harman, is defined as follows: "The daily silver quotation reported by Handy & Harman, in cents and tenths of a cent per troy ounce, is the lowest price at which offers can be obtained by Handy & Harman for silver in commercial bar form, in accordance with ASTM Designation: B413-69 Specification for Refined Silver, Grade 99.90 for nearby delivery at New York, in quantities sufficient to meet its requirements."

The third table provides the annual extremes and averages of silver prices, per troy ounce, for the calendar years 1874–1978.

Daily spot silver quotations per troy ounce for commercial bars 999/1000 fine in New York in 1977

1000	table	2000	07	for	annual	high	low	and	average	prices	L
1366	table,	page	77,	101	annuai	mgn,	low,	and	average	prices	

Day	January	February	March	April	May	June
1	(*)	\$4.455	\$4.710	\$4.845	(*)	\$4.575
2	(*)	4.460	4.807	(*)	\$ 4 .775	4.550
3	\$4.370	4.498	4.785	(*)	4.765	4.505
4	4.425	4.500	4.790	4.870	4.755	(*)
5	4.395	(*)	(*)	4.820	4.715	(*)
6	4.409	(*)	(*)	4.680	4.745	4.535
7	4.410	4.575	4.890	4.675	(*)	4.535
8	(*)	4.510	4.845	(*)	(*)	4.510
9	(*)	4.550	4.825	(*)	4.700	4.40
10	4.390	4.505	4.800	(*)	4.720	4.40
[1]	4.300	4.470	4.775	4.755	4.775	(*)
12	4.325	(*)	(*)	4.742	4.725	(*)
13	4.340	(*)	(*)	4.787	4.796	4.323
4	4.335	4.500	4.795	4.730	(*)	4.34
15	(*)	4.490	4.845	4.750	(*)	4.385
6	(*)	4.510	4.853	(*)	4.777	4.370
7	4.375	4.530	4.895	(*)	4.760	4.34
8	4.380	4.535	4.910	4.840	4.720	(*)
9	4.390	(*)	(*)	4.855	4.715	(*)
20	4.410	(*)	(*)	4.820	4.718	4.430
21	4.405	(*)	4.960	4.815	(*)	4.420
22	(*)	4.550	4.935	4.860	(*)	4.360
23	(*)	4.613	4.955	(*)	4.600	4.420
.4	4.495	4.610	4.910	(*)	4.595	4.418
.5	4.515	4.615	4.894	4.770	4.570	(*)
26	4.500	(*)	(*)	4.735	4.500	(*)
27	4.495	(*)	(*)	4.765	4.580	4.500
28	4.455	4.720	4.810	4.702	(*)	4.460
9	(*)		4.773	4.725	(*)	4.485
0	\ /		4.805	(*)	(*)	4.465
81	4.470		4.790		4.525 .	
Monthly average	4.40900	4.53505	4.84161	4.77705	4.69195	4.44300

Daily spot silver quotations per troy ounce for commercial bars 999/1000 fine in New York in 1977—Continued

Day	July	August	September	October	November	December
1	\$4.415	\$4 455	\$4.475	(*)	\$4.850	\$4 725
2	(*)	4.520	4.480	(*)	4.795	4.675
3	(*)	4.540	(*)	\$4.650	4.898	(*)
4	(*)	4.538	(*)	4.625	4.910	(*)
5	4.395	4.525		4.650	(*)	4.730
6	4.405	(*)	4.478	4.655		4.720
7	4.410	(*)	4.506	4.640	4.895	4.735
8	4.425	4.530	4.475	(*)	4.895	4.789
9	(*)	4.570	4.487	(*)	4.945	4.715
10	(*)	4.560		(*)	4.935	(*)
11	4.390	4,509	* *	4.728	4.940	(*)
12	4.450	4.470	4.495	4.780	(*)	4,700
13	4,490	(*)	4.430	4.755	* /	4.645
14	(*)	(*)	4.465	4.790	4.890	4.685
15	4.500	4.400	4.460	(*)	4.795	4.610
16	(*)	4.350		(*)	4.750	4.665
17	(*)	4.360		4.800	4.820	(*)
18	4,505	4.380	, , ,	4.820	4.850	(*)
19	4.540	4.390	()	4.815	(*)	4.658
20	4.560	(*)	4.600	4.770	(*)	4.628
21	4.555	(*)	4.580	4.770	4.790	4.680
22	4.575	4.365		(*)	4.690	4.650
23	(*)	4.330		(*)	4.705	4.733
24	(*)	4.385		4.860	(*)	(*)
25	4.620	4.378		4.845	(*)	(*)
26	4.600	4.385	` /	4.840	(*)	(*)
27	4.580	(*)	4.610	4.795	(*)	4.765
28	4.545	(*)	4.650	4.820	4.775	4.757
29	4.503	4.393		(*)	4.700	4.780
	(*)	4.439		(*)	4.740	4.780
• • • • • • • • • • • • • • • • • • • •	(*)	4.448		4.855		(*)
31						
Monthly average	4.49805	4.44435	4.53862	4.76315	4.82840	4.70595

^{*} Market closed.

Source.—Handy & Harman, New York, N.Y.

Daily spot silver quotations per troy ounce for commercial bars 999/1000 fine in New York in 1978

[See following table for annual high, low, and average prices]

Day	January	February	March	April	May	June
1	(*)	\$4.950	\$4.933	(*)	\$4.951	\$5.383
2	(*)	4.875	5.005	(*)	4.975	5.471
3	\$4.910	4.888	4.990	\$5.396	5.035	(*)
4	4.918	(*)	(*)	5.161	5.087	(*)
5	4.829	(*)	(*)	5.244	5.070	5.317
6	4.903	4.895	4.998	5.265	(*)	5.303
7	(*)	4.850	5.210	5.218		5.348
8	(*)	4.846	5.310	(*)	5 .027	5.265
9	4.915	4.836	5.334	(*)	5.044	5.248
10	4.935	4.900	5.285	5.228	5.060	(*)
11	4.915	(*)	(*)	5.260		(*)
12	4.915	(*)	(*)	5.310		<u>5.2</u> 36
13	4.895	4.935	5.420	5.225		5.279
14	(*)	4.920	5.465	5.185	\ /	5.290
15	(*)	4.975	5.436	(*)	5.074	5.230
16	4.965	5.009	5.396	(*)	5.059	5.315
17	4.935	5.006	5.456	5.065		(*)
18	4.898	(*)	(*)	5.050		(*)
19	4.915	(*)	(*)	5.040		5.330
20	(*)	(*)	5.241	4.961		5.375
21	(*)	5.035	5.231	5.010		5.350
22	(*)	5.005	5.266	(*)	5.170	5.285
23	4.973	5.015	5.245	(*)	5.180	5.325
24	4.990	4.920	(*)	4.923		(*)
25	5.025	(*)	(*)	4.896		(*)
26	4.972	(*)	(*)	4.956		5.325
27	4.975	4.949	5.375	4.990		5.315
28	(*)	4.968	5.345	4.985		5.359
29	` '	4.700	5.325	(*)	(*)	5.335
30	. /		5.327	(*)	5.395	5.265
31						
_						
Monthly average	4.93395	4.93563	5.27286	5.11840	5.12068	5.31586
Day	July	August	September	October	November	December
1	(*)	\$5.589	\$5.520	(*)	\$5.940	\$5.960
2	(*)	5.570	(*)	\$5.660	5.880	(*)
3	\$5.259	5.510	(*)	5.780	5.835	(*)
4	(*)	5.485	(*)	5.805	(*)	5.955
5	5.247	(*)	5.521	5 005		5 000
6	6 102			5.805	(*)	5.880
3	5.192	(*)	5.548	5.795		5.835
7	5.192	(*) 5.530		5.795		
7 8	5.215		5.548	5.795 (*)	5.820 5.858	5.835 5.844
	5.215 (*)	5.530	5.548 5.497 5.428	5.795 (*) (*)	5.820 5.858 5.875	5.835 5.844 5.885
8 9	5.215 (*) (*)	5.530 5.515 5.505	5.548 5.497 5.428 (*)	5.795 (*) (*) (*)	5.820 5.858 5.875 5.695	5.835 5.844 5.885 (*)
8	5.215 (*) (*) 5.287	5.530 5.515	5.548 5.497 5.428 (*) (*)	5.795 (*) (*) (*) (*) 5.950	5.820 5.858 5.875 5.695 5.671	5.835 5.844 5.885 (*) (*)
89	5.215 (*) (*) 5.287 5.252	5.530 5.515 5.505 5.488 5.589	5.548 5.497 5.428 (*) (*) 5.470	5.795 (*) (*) (*) 5.950 5.957	5.820 5.858 5.875 5.695 5.671 (*)	5.835 5.844 5.885 (*) (*) 5.880
8 9 10 11	5.215 (*) (*) 5.287 5.252 5.276	5.530 5.515 5.505 5.488 5.589 (*)	5.548 5.497 5.428 (*) (*) 5.470 5.485	5.795 (*) (*) (*) (*) 5.950 5.957 5.900	5.820 5.858 5.875 5.695 5.671 (*)	5.835 5.844 5.885 (*) (*) 5.880 5.854
8 9 10 11 12 13	5.215 (*) (*) 5.287 5.252 5.276 5.281	5.530 5.515 5.505 5.488 5.589 (*) (*)	5.548 5.497 5.428 (*) (*) 5.470 5.485 5.535	5.795 (*) (*) (*) 5.950 5.957 5.900 5.900	5.820 5.858 5.875 5.695 5.671 (*) (*) 5.704	5.835 5.844 5.885 (*) (*) 5.880 5.854 5.900
8 9 10 11 12 13	5.215 (*) (*) 5.287 5.252 5.276 5.281 5.247	5.530 5.515 5.505 5.488 5.589 (*) (*) 5.678	5.548 5.497 5.428 (*) (*) 5.470 5.485 5.535 5.548	5.795 (*) (*) (*) 5.950 5.957 5.900 5.900 (*)	5.820 5.858 5.875 5.695 5.671 (*) (*) 5.704 5.808	5.835 5.844 5.885 (*) (*) 5.880 5.854 5.900 5.849
8 9 10 11 12 13 14	5.215 (*) (*) 5.287 5.252 5.276 5.281 5.247 (*)	5.530 5.515 5.505 5.488 5.589 (*) (*) 5.678 5.615	5.548 5.497 5.428 (*) (*) 5.470 5.485 5.535 5.548 5.605	5.795 (*) (*) (*) 5.950 5.957 5.900 (*) (*)	5.820 5.858 5.875 5.695 5.671 (*) (*) 5.704 5.808 5.730	5.835 5.844 5.885 (*) (*) 5.880 5.854 5.900 5.849 5.880
8 9 10 11 12 13 14 15	5.215 (*) (*) 5.287 5.252 5.276 5.281 5.247 (*) (*)	5.530 5.515 5.505 5.488 5.589 (*) (*) 5.678 5.615 5.619	5.548 5.497 5.428 (*) (*) 5.470 5.485 5.535 5.548 5.605 (*)	5.795 (*) (*) (*) 5.950 5.957 5.900 (*) (*) (*) 5.860	5.820 5.858 5.875 5.695 5.671 (*) (*) 5.704 5.808 5.730 5.759	5.835 5.844 5.885 (*) (*) 5.880 5.854 5.900 5.849 5.880 (*)
8 9 10 11 12 13 14 15	5.215 (*) (*) 5.287 5.252 5.276 5.281 5.247 (*) (*) 5.155	5.530 5.515 5.505 5.488 5.589 (*) (*) 5.678 5.615 5.619 5.430	5.548 5.497 5.428 (*) (*) 5.470 5.485 5.535 5.548 5.605 (*) (*)	5.795 (*) (*) (*) 5.950 5.957 5.900 (*) (*) (*) 5.860 5.940	5.820 5.858 5.875 5.695 5.671 (*) (*) 5.704 5.808 5.730 5.759 5.829	5.835 5.844 5.885 (*) (*) 5.880 5.854 5.900 5.849 5.880 (*) (*)
8 9 10 11 12 13 14 15 16	5.215 (*) (*) 5.287 5.252 5.276 5.281 5.247 (*) (*) 5.155 5.220	5.530 5.515 5.505 5.488 5.589 (*) (*) 5.678 5.615 5.619 5.430 5.419	5.548 5.497 5.428 (*) (*) 5.470 5.485 5.535 5.548 5.605 (*) (*)	5.795 (*) (*) (*) 5.950 5.957 5.900 (*) (*) (*) 5.860 5.940 5.935	5.820 5.858 5.875 5.695 5.671 (*) (*) 5.704 5.808 5.730 5.759 5.829 (*)	5.835 5.844 5.885 (*) (*) 5.880 5.854 5.900 5.849 5.880 (*) (*)
8 9 10 11 12 13 14 15 16 17	5.215 (*) (*) 5.287 5.252 5.276 5.281 5.247 (*) (*) 5.155 5.220 5.226	5.530 5.515 5.505 5.488 5.589 (*) (*) 5.678 5.615 5.619 5.430 5.419 (*)	5.548 5.497 5.428 (*) (*) 5.470 5.485 5.535 5.548 5.605 (*) (*) 5.562 5.607	5.795 (*) (*) (*) 5.950 5.957 5.900 (*) (*) 5.860 5.940 5.935 5.880	5.820 5.858 5.875 5.695 5.671 (*) (*) 5.704 5.808 5.730 5.759 5.829 (*) (*)	5.835 5.844 5.885 (*) (*) 5.880 5.854 5.900 5.849 5.880 (*) (*) (*) 5.960 5.945
8 9 10 11 12 13 14 15 16 17 18	5.215 (*) (*) 5.287 5.252 5.276 5.281 5.247 (*) (*) 5.155 5.220 5.226 5.300	5.530 5.515 5.505 5.488 5.589 (*) (*) 5.678 5.615 5.619 5.430 5.419 (*)	5.548 5.497 5.428 (*) (*) 5.470 5.485 5.535 5.548 5.605 (*) (*) 5.562 5.607 5.620	5.795 (*) (*) (*) 5.950 5.957 5.900 5.900 (*) (*) 5.860 5.940 5.935 5.880 5.878	5.820 5.858 5.875 5.695 5.671 (*) (*) 5.704 5.808 5.730 5.759 5.829 (*) (*)	5.835 5.844 5.885 (*) (*) 5.880 5.854 5.900 5.849 5.880 (*) (*) (*) 5.960 5.945 5.975
8 9 10 11 12 13 14 15 16 17 18 19 20 21	5.215 (*) (*) 5.287 5.252 5.276 5.281 5.247 (*) (*) 5.155 5.220 5.226 5.300 5.377	5.530 5.515 5.505 5.488 5.589 (*) (*) 5.678 5.615 5.619 5.430 5.419 (*) (*)	5.548 5.497 5.428 (*) (*) 5.470 5.485 5.535 5.548 5.605 (*) (*) 5.562 5.607 5.620 5.660	5.795 (*) (*) (*) 5.950 5.957 5.900 5.900 (*) (*) 5.860 5.940 5.935 5.880 5.878 (*)	5.820 5.858 5.875 5.695 5.671 (*) (*) 5.704 5.808 5.730 5.759 5.829 (*) (*) 5.956 6.009	5.835 5.844 5.885 (*) (*) 5.880 5.854 5.900 5.849 5.880 (*) (*) 5.960 5.945 5.975
8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	5.215 (*) (*) 5.287 5.252 5.276 5.281 5.247 (*) (*) 5.155 5.220 5.226 5.300 5.377 (*)	5.530 5.515 5.505 5.488 5.589 (*) (*) 5.678 5.615 5.619 5.430 5.419 (*) (*) 5.377 5.365	5.548 5.497 5.428 (*) (*) 5.470 5.485 5.535 5.548 5.605 (*) (*) 5.562 5.607 5.620 5.660 5.625	5.795 (*) (*) (*) 5.950 5.957 5.900 5.900 (*) (*) 5.860 5.940 5.935 5.880 5.878 (*) (*)	5.820 5.858 5.875 5.695 5.671 (*) (*) 5.704 5.808 5.730 5.759 5.829 (*) (*) 5.956 6.009 6.045	5.835 5.844 5.885 (*) (*) 5.880 5.854 5.900 5.849 5.880 (*) (*) (*) 5.960 5.945 5.975 5.955 5.915
8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	5.215 (*) (*) 5.287 5.252 5.276 5.281 5.247 (*) (*) 5.155 5.220 5.226 5.300 5.377 (*) (*)	5.530 5.515 5.505 5.488 5.589 (*) (*) 5.678 5.615 5.619 5.430 5.419 (*) (*) 5.377 5.365 5.347	5.548 5.497 5.428 (*) (*) 5.470 5.485 5.535 5.548 5.605 (*) (*) 5.562 5.607 5.620 5.660 5.625 (*)	5.795 (*) (*) (*) 5.950 5.957 5.900 5.900 (*) (*) (*) 5.860 5.940 5.935 5.880 5.878 (*) (*) 5.830	5.820 5.858 5.875 5.695 5.671 (*) (*) 5.704 5.808 5.730 5.759 5.829 (*) (*) (*) 5.956 6.009 6.045 (*)	5.835 5.844 5.885 (*) (*) 5.880 5.854 5.900 5.849 5.880 (*) (*) (*) 5.960 5.945 5.975 5.955 5.915 (*)
8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	5.215 (*) (*) 5.287 5.252 5.276 5.281 5.247 (*) (*) 5.155 5.220 5.226 5.300 5.377 (*) (*) (*) 5.450	5.530 5.515 5.505 5.488 5.589 (*) (*) 5.678 5.615 5.619 5.430 5.419 (*) (*) 5.377 5.365 5.347 5.412	5.548 5.497 5.428 (*) (*) 5.470 5.485 5.535 5.548 5.605 (*) (*) 5.562 5.607 5.620 5.660 5.625 (*) (*)	5.795 (*) (*) (*) 5.950 5.957 5.900 5.900 (*) (*) (*) 5.860 5.940 5.935 5.880 5.878 (*) (*) 5.830 5.815	5.820 5.858 5.875 5.695 5.671 (*) (*) 5.704 5.808 5.730 5.759 5.829 (*) (*) (*) 5.956 6.009 6.045 (*)	5.835 5.844 5.885 (*) (*) 5.880 5.854 5.900 5.849 5.880 (*) (*) (*) 5.960 5.945 5.975 5.955 5.915 (*) (*)
8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25	5.215 (*) (*) 5.287 5.252 5.276 5.281 5.247 (*) (*) 5.155 5.220 5.226 5.300 5.377 (*) (*) (*) 5.450 5.525	5.530 5.515 5.505 5.488 5.589 (*) (*) 5.678 5.615 5.619 5.430 5.419 (*) (*) (*) 5.377 5.365 5.347 5.412 5.409	5.548 5.497 5.428 (*) (*) 5.470 5.485 5.535 5.548 5.605 (*) (*) 5.562 5.660 5.620 5.620 (*) (*) (*) 5.700	5.795 (*) (*) (*) 5.950 5.957 5.900 5.900 (*) (*) (*) 5.860 5.940 5.935 5.880 5.878 (*) (*) 5.830 5.815 5.920	5.820 5.858 5.875 5.695 5.671 (*) (*) 5.704 5.808 5.730 5.759 5.829 (*) (*) (*) (*) 5.956 6.009 6.045 (*) (*)	5.835 5.844 5.885 (*) (*) 5.880 5.854 5.900 5.849 5.880 (*) (*) (*) 5.945 5.975 5.955 5.915 (*) (*)
8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26	5.215 (*) (*) 5.287 5.252 5.276 5.281 5.247 (*) (*) 5.155 5.220 5.226 5.300 5.377 (*) (*) (*) 5.450 5.525 5.472	5.530 5.515 5.505 5.488 5.589 (*) (*) 5.678 5.615 5.619 5.430 5.419 (*) (*) (*) 5.377 5.365 5.347 5.412 5.409 (*)	5.548 5.497 5.428 (*) (*) 5.470 5.485 5.535 5.548 5.605 (*) (*) 5.562 5.620 5.660 5.625 (*) (*) 5.700 5.655	5.795 (*) (*) (*) 5.950 5.957 5.900 5.900 (*) (*) (*) 5.860 5.940 5.935 5.880 5.878 (*) (*) 5.830 5.815 5.920 6.125	5.820 5.858 5.875 5.695 5.671 (*) (*) 5.704 5.808 5.730 5.759 5.829 (*) (*) (*) (*) (*) (*) (*) (*) (*) (*)	5.835 5.844 5.885 (*) (*) 5.880 5.854 5.900 5.849 5.880 (*) (*) (*) 5.960 5.945 5.975 5.955 5.915 (*) (*) (*)
8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27	5.215 (*) (*) 5.287 5.252 5.276 5.281 5.247 (*) (*) 5.155 5.220 5.226 5.300 5.377 (*) (*) (*) 5.450 5.525 5.472 5.445	5.530 5.515 5.505 5.488 5.589 (*) (*) 5.678 5.615 5.619 5.430 5.419 (*) (*) (*) 5.377 5.365 5.347 5.412 5.409 (*)	5.548 5.497 5.428 (*) (*) 5.470 5.485 5.535 5.548 5.605 (*) (*) 5.562 5.660 5.625 (*) (*) 5.700 5.655 5.615	5.795 (*) (*) (*) 5.950 5.957 5.900 5.900 (*) (*) (*) 5.860 5.940 5.935 5.880 5.878 (*) (*) 5.830 5.815 5.920 6.125 6.075	5.820 5.858 5.875 5.695 5.671 (*) (*) 5.704 5.808 5.730 5.759 5.829 (*) (*) (*) (*) 6.009 6.045 (*) (*) (*)	5.835 5.844 5.885 (*) (*) 5.880 5.854 5.900 5.849 5.880 (*) (*) (*) 5.945 5.975 5.955 5.915 (*) (*) (*)
8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28	5.215 (*) (*) 5.287 5.252 5.276 5.281 5.247 (*) (*) 5.155 5.220 5.226 5.300 5.377 (*) (*) (*) 5.450 5.525 5.472 5.445 5.610	5.530 5.515 5.505 5.488 5.589 (*) (*) 5.678 5.615 5.619 5.430 5.419 (*) (*) (*) 5.377 5.365 5.347 5.412 5.409 (*) (*)	5.548 5.497 5.428 (*) (*) 5.470 5.485 5.535 5.548 5.605 (*) (*) 5.562 5.660 5.625 (*) (*) (*) 5.700 5.655 5.615 5.650	5.795 (*) (*) (*) 5.950 5.957 5.900 5.900 (*) (*) (*) 5.860 5.940 5.935 5.880 5.878 (*) (*) (*) 5.830 5.815 5.920 6.125 6.075 (*)	5.820 5.858 5.875 5.695 5.671 (*) (*) 5.704 5.808 5.730 5.759 5.829 (*) (*) (*) (*) 6.045 (*) (*) (*) 6.050 5.990	5.835 5.844 5.885 (*) (*) 5.880 5.854 5.900 5.849 5.880 (*) (*) (*) 5.960 5.945 5.975 5.955 5.915 (*) (*) (*) (*) 5.945 6.035 6.044
8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29	5.215 (*) (*) 5.287 5.252 5.276 5.281 5.247 (*) (*) 5.155 5.220 5.226 5.300 5.377 (*) (*) (*) 5.450 5.525 5.472 5.445 5.610 (*)	5.530 5.515 5.505 5.488 5.589 (*) (*) 5.678 5.615 5.619 5.430 5.419 (*) (*) (*) 5.377 5.365 5.347 5.412 5.409 (*) (*)	5.548 5.497 5.428 (*) (*) 5.470 5.485 5.535 5.548 5.605 (*) (*) 5.562 5.607 5.620 5.660 5.625 (*) (*) 5.700 5.655 5.615 5.650 5.645	5.795 (*) (*) (*) 5.950 5.957 5.900 5.900 (*) (*) 5.860 5.940 5.935 5.880 5.878 (*) (*) 5.830 5.815 5.920 6.125 6.075 (*) (*)	5.820 5.858 5.875 5.695 5.671 (*) (*) 5.704 5.808 5.730 5.759 5.829 (*) (*) (*) (*) 5.956 6.009 6.045 (*) (*) (*) (*)	5.835 5.844 5.885 (*) (*) 5.880 5.854 5.900 5.849 5.880 (*) (*) 5.960 5.945 5.975 5.955 5.915 (*) (*) (*) 5.945 6.035 6.044 6.074
8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	5.215 (*) (*) 5.287 5.252 5.276 5.281 5.247 (*) (*) 5.155 5.220 5.226 5.300 5.377 (*) (*) (*) 5.450 5.525 5.472 5.445 5.610 (*) (*) (*)	5.530 5.515 5.505 5.488 5.589 (*) (*) 5.678 5.615 5.619 5.430 5.419 (*) (*) (*) 5.377 5.365 5.347 5.412 5.409 (*) (*) (*) 5.459 5.468 5.499	5.548 5.497 5.428 (*) (*) 5.470 5.485 5.535 5.548 5.605 (*) (*) 5.562 5.660 5.625 (*) (*) 5.700 5.655 5.615 5.650 5.645 (*)	5.795 (*) (*) (*) 5.950 5.957 5.900 5.900 (*) (*) (*) 5.860 5.940 5.935 5.880 5.878 (*) (*) 5.830 5.815 5.920 6.125 6.075 (*) (*) 6.296	5.820 5.858 5.875 5.695 5.671 (*) (*) 5.704 5.808 5.730 5.759 5.829 (*) (*) (*) 6.045 (*) (*) (*) 6.050 5.990 5.960 5.915	5.835 5.844 5.885 (*) (*) 5.880 5.854 5.900 5.849 5.880 (*) (*) (*) 5.960 5.945 5.975 5.955 5.915 (*) (*) (*) (*) 6.035 6.044 6.074 (*)
8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29	5.215 (*) (*) 5.287 5.252 5.276 5.281 5.247 (*) (*) 5.155 5.220 5.226 5.300 5.377 (*) (*) (*) 5.450 5.525 5.472 5.445 5.610 (*)	5.530 5.515 5.505 5.488 5.589 (*) (*) 5.678 5.615 5.619 5.430 5.419 (*) (*) (*) 5.377 5.365 5.347 5.412 5.409 (*) (*) (*) 5.459 5.468 5.499	5.548 5.497 5.428 (*) (*) 5.470 5.485 5.535 5.548 5.605 (*) (*) 5.562 5.607 5.620 5.660 5.625 (*) (*) 5.700 5.655 5.615 5.650 5.645	5.795 (*) (*) (*) 5.950 5.957 5.900 5.900 (*) (*) (*) 5.860 5.940 5.935 5.880 5.878 (*) (*) 5.830 5.815 5.920 6.125 6.075 (*) (*) 6.296	5.820 5.858 5.875 5.695 5.671 (*) (*) 5.704 5.808 5.730 5.759 5.829 (*) (*) (*) (*) 5.956 6.009 6.045 (*) (*) (*) (*)	5.835 5.844 5.885 (*) (*) 5.880 5.854 5.900 5.849 5.880 (*) (*) 5.960 5.945 5.975 5.955 5.915 (*) (*) (*) 5.945 6.035 6.044 6.074

^{*} Market closed.

Price of silver per troy ounce in New York, 1874-1978 1

Calendar year	High	Low	Average	Calendar year	High	Low	Average
1874	\$1.29375	\$1.25500	\$1.27195	1927	\$0.60312	\$0.54187	\$0.56680
1875	1.26125	1.21000	1.23883	1928	.63937	.56812	.58488
1876	1.26000	1.03500	1.14950	1929	.57812	.46812	.53306
1877	1.26000	1.16000	1.19408	1930	.46875	.30750	.38154
1878	1.20750	1.08500	1.15429	1931	.37520	.25750	.28701
1879	1.16750	1.06500	1.12088	1932	.31000	.24250	.27892
1880	1.15000	1.11250	1.13931	1933	.45000	.24500	.34727
1881	1.14500	1.11000	1.12823	1934	.55750	.41750	.47973
1882	1.15000	1.09000	1.13855	1935	.81000	.49750	.64273
1883	1.11750	1.09500	1.10874	1936	.49750	.44750	.45087
1884	1.13250	1.08000	1.11161	1937	.46750	.44750	.44883
885	1.09500	1.02750	1.06428	1938	.44750	.42750	.43225
1886	1.03500	.92500	.99880	1939	.42750	.34750	.39082
887	1.03500	.95000	.97899	1940	.35625	.34750	.34773
888	.97750	.92000	.94300	1941	.35125	.34750	.34783
889	.97250	.92500	.93634	1942	.44750	.35125	.38333
890	1.20500	.95750	1.05329	1943	.44750	.44750	.44750
1891	1.07500	.94750	.99033	1944	.44750	.44750	.44750
892	.95250	.83000	.87552	1945	.70750	.44750	.51928
893	.85000	.65000	.78219	1946	.90125	.70750	.80151
894	.70000	.59500	.64043	1947	.86250	.59750	.71820
895	.69000	.60000	.66268	1948	.77500	.70000	.74361
896	.70250	.65625	.68195	1949	.73250	.70000	.71930
897	.66125	.52750	.60774	1950	.80000	.71750	.74169
898	.62250	.55125	.59064	1951	.90160	.80000	.89368
899	.64750	.58625	.60507	1952	.88000	.82750	.84941
900	.65750	.59750	.62065	1953	.85250	.83250	.85188
901	.64500	.54750	.59703	1954	.85250	.85250	.85250
902	.56875	.47375	.52815	1955	.92000	.85250	.89099
903	.62375	.47500	.54208	1956	.91625	.90000	.90826
904	.62500	.53375	.57843	1957	.91375	.89625	.90820
905	.66500	.55625	.61008	1958	.90375	.88625	.89044
906	.72375	.63125	.67379	1959	.91625	.89875	.91202
907	.71000	.52750	.65978	1960	.91375	.91375	.91375
908	.58875	.48250	.53496	1961	1.04750	.91375	.92449
909	.54500	.50750	.52163	1962	1.22000	1.01250	1.08521
910	.57625	.50750		1963 ²	1.29300	1.21000	1.27912
911	.57500	.52125	.54002	1964 ²	1.29300	1.29300	1.29300
912	.65625	.55250	.62006	1965 ²	1.29300	1.29300	1.29300
913		.58000	.61241	1966 ²	1.29300	1.29300	1.29300
914	.65125			1967 ²			
	.60875	.49000	.56331		2.17000	1.29300	1.54967
915	.58000	.47750	.51062	1968	2.56500	1.81000	2.14460
916	.79125	.57250	.67151	1969	2.02500	1.54000	1.79067
917	1.16500	.73125	.84000	1970	1.93000	1.57200	1.77082
918	1.01937	.88937	.98445	1971	1.75200	1.28800	1.54564
919	1.38250	1.01375	1.12087	1972	2.04800	1.38700	1.68455
920	1.37875	.60375	1.01940	1973	3.28000	1.96200	2.55756
921	.73813	.53188	.63096	1974	6.70000	3.27000	4.70798
922	.74188	.62875	.67934	1975	5.22500	3.91000	4.41852
923	.69000	.62875	.65239	1976	5.10000	3.81500	4.35346
924	.72375	.63000	.67111	1977	4.96000	4.30000	4.62302
925	.73187	.66812	.69406	1978	6.29600	4.82900	5.40089
926	.68937	.51812	.62428				

¹ Prices are as follows:

HISTORICAL NOTE.—There was no open-market price of silver as such in the United States under the bimetallic monetary standard which existed from Apr. 2, 1792, until Feb. 12, 1873. The ratios of the silver dollar to the gold dollar in this period were:

	Ratio of silver
Act of	to gold
Apr. 2, 1792	15 to 1
June 28, 1834	16.002 to 1
In 10 1027	15 988 ± to 1

^{1874-1917:} Asked price per fine ounce (unrefined).

^{1918-29:} Mean of bid and asked prices per fine ounce (unrefined).

^{1930-61:} Official quotations per ounce 999/1000 fine (unrefined).

^{1962-66:} Official quotations per ounce 999/1000 fine (refined). Quotations for refined silver are one-fourth cent above prices for unrefined silver.

² The price of \$1.293 per ounce was effective continuously from Sept. 9, 1963 through May 18, 1967.

Coinage metals

During 1978 three metals were used in the manufacture of coins of the United States. Nickel and zinc were obtained from the U.S. Government's stockpile of these metals. Copper was purchased on the open market.

The market quotations for these three base metals for a significant period of years in specified categories applicable to the Mint's operations are contained in the accompanying tables.

Daily copper quotations, electrolytic "cathode, full plate" 1974-78 [Domestic producers. Delivered U.S. destinations. In U.S. cents per avoirdupois pound]

Jan. 2 (Wed.) through Apr. 30 (Tues.)	68.00
May 1 (Wed.) through May 31 (Fri.)	
June 3 (Mon.) through June 4 (Tues.)	
June 5 (Wed.) through Sept. 13 (Fri.)	
Sept. 16 (Mon.) through Sept. 17 (Tues.)	
Sept. 18 (Wed.) through Oct. 15 (Tues.)	79.00
Oct. 16 (Wed.) through Nov. 22 (Fri.)	
Nov. 25 (Mon.)	
Nov. 26 (Tues.) through Dec. 27 (Fri.)	72.00
Dec. 30 (Mon.) through Dec. 31 (Tues.)	68.00-72.00
1975	
Jan. 2 (Thurs.)	68.00-72.00
Jan. 3 (Fri.) through Jan. 28 (Tues.)	
Jan. 29 (Wed.) through Jan. 31 (Fri.)	
Feb. 3 (Mon.) through June 17 (Tues.)	63.00
June 18 (Wed.)	
June 19 (Thurs.)	
June 20 (Fri.) through July 28 (Mon.)	
July 29 (Tues.) through Dec. 31 (Wed.)	

Daily copper quotations, electrolytic "cathode, full plate" 1974–78—Con. [Domestic producers. Delivered U.S. destinations. In U.S. cents]

Jan. 2 (Fri.) through Mar. 18 (Thurs.) 63.00 Mar. 19 (Fri.) 63.00-66.0 Mar. 22 (Mon.) through Apr. 9 (Fri.) 66.00 Apr. 12 (Mon.) 66.00-70.0	56.00
Apr. 13 (Tues.) through June 30 (Wed.) 70.00 July 1 (Thurs.) through Oct. 7 (Thurs.) 74.00 Oct. 8 (Fri.) through Oct. 19 (Tues.) 70.00–74.0 Oct. 20 (Wed.) through Dec. 1 (Wed.) 70.00 Dec. 2 (Thurs.) through Dec. 3 (Fri.) 65.00–70.0 Dec. 6 (Mon.) through Dec. 31 (Fri.) 65.00	74.00
1977	
Jan. 3 (Mon.) through Jan. 19 (Wed.) 65.00 Jan. 20 (Thurs.) through Jan. 24 (Mon.) 65.00–67.00 Jan. 25 (Tues.) through Jan. 31 (Mon.) 65.00–68.00 Feb. 1 (Tues.) through Mar. 1 (Tues.) 68.00 Mar. 2 (Wed.) through Mar. 3 (Thurs.) 71.00 Mar. 4 (Fri.) through Mar. 17 (Thurs.) 71.00 Mar. 18 (Fri.) through Mar. 21 (Mon.) 71.00–74.00 Mar. 22 (Tues.) through Apr. 26 (Tues.) 74.00 Apr. 27 (Wed.) through May 23 (Mon.) 71.00–74.00 May 24 (Tues.) through May 31 (Tues.) 71.00 June 1 (Wed.) through July 8 (Fri.) 68.00–71.00 July 11 (Mon.) through July 20 (Wed.) 68.00 July 25 (Mon.) through Aug. 17 (Wed.) 65.00–68.00 Aug. 18 (Thurs.) through Aug. 29 (Mon.) 60.00–65.00 Aug. 30 (Tues.) through Dec. 9 (Fri.) 60.00 Dec. 12 (Mon.) through Dec. 16 (Fri.) 60.00–62.50 Dec. 19 (Mon.) 60.00–62.50	71.00 74.00 74.00 71.00 68.00 65.00

Daily copper quotations, electrolytic "cathode, full plate" 1974-78—Con.

[Domestic producers. Delivered U.S. destinations. In U.S. cents]

In 2 (Tues) through Ion 22 (Mon)	62.00
Jan. 3 (Tues.) through Jan. 23 (Mon.)	. 03.00
Jan. 24 (Tues.) through Feb. 28 (Tues.)	61.50-63.00
Mar. 1 (Wed.)	. 60.00–63.00
Mar. 2 (Thurs.) through Mar. 8 (Wed.)	60.00-61.50
Mar. 9 (Thurs.) through Mar. 27 (Mon.)	61.50
Mar. 28 (Tues.) through Mar. 30 (Thurs.)	61.50-65.00
Mar. 31 (Fri.) through May 25 (Thurs.)	
May 26 (Fri.) through May 31 (Wed.)	
June 1 (Thurs.) through June 2 (Fri.)	
June 5 (Mon.)	
June 6 (Tues.)	
June 7 (Wed.)	
June 8 (Thurs.)	
June 9 (Fri.)	
June 12 (Mon.)	
June 13 (Tues.)	
June 14 (Wed.)	
June 15 (Thurs.)	
June 16 (Fri.)	
June 19 (Mon.) through June 30 (Fri.)	65.00
July 3 (Mon.) through July 13 (Thurs.)	
July 14 (Fri.)	62.50-64.00
July 17 (Mon.) through July 25 (Tues.)	63.00-64.00
July 26 (Wed.) through July 31 (Mon.)	63.00-65.00
Aug. 1 (Tues.) through Aug. 2 (Wed.)	65.00-65.50
Aug. 3 (Thurs.) through Aug. 10 (Thurs.)	
Aug. 11 (Fri.)	
Aug. 14 (Mon.) through Aug. 17 (Thurs.)	
Aug. 18 (Fri.) through Aug. 31 (Thurs.)	
Sept. 1 (Fri.) through Sept. 20 (Wed.)	
Sept. 21 (Thurs.)	67.00
Sept. 22 (Fri.) through Sept. 26 (Tues.)	
Sept. 27 (Wed.)	
Sept. 28 (Thurs.) through Oct. 2 (Tues.)	67.00-68.25
Oct. 3 (Wed.) through Oct. 4 (Thurs.)	67.00-69.00
Oct. 5 (Fri.)through Oct. 9 (Mon.)	67.00-70.00
Oct. 10 (Tues.) through Oct. 11 (Wed.)	68.00-71.00
Oct. 12 (Thurs.) through Oct. 23 (Mon.)	69.00-71.00
Oct. 24 (Tues.) through Oct. 25 (Wed.)	
Oct. 26 (Thurs.) through Oct. 27 (Fri.)	
Oct. 30 (Mon.) through Oct. 31 (Tues.)	
Nov. 1 (Wed.) through Nov. 9 (Thurs.)	
Nov. 10 (Fri.) through Nov. 15 (Wed.)	
Nov. 16 (Thurs) through Nov. 15 (Wed.)	72.00
Nov. 16 (Thurs.) through Nov. 29 (Wed.)	69.00
Nov. 30 (Thurs.) through Dec. 1 (Fri.)	70.00
Dec. 4 (Mon.) through Dec. 11 (Mon.)	
Dec. 12 (Tues.) through Dec. 18 (Mon.)	
Dec. 19 (Tues.)	71.00
Dec. 20 (Wed.) through Dec. 27 (Wed.)	71.00-73.00
Dec. 28 (Thurs.) through Dec. 29 (Fri.)	71.00-73.50
SOURCE.—American Metal Market.	
Sources.—American metal market.	

Nickel electrolytic cathode prices in the United States, 1969-1978 1

[In U.S. cents per avoirdupois pound]

10	0	-	0
- /	4 3	\sim	4 4
- /	~	23	\mathbf{v}

1909	
Jan. 2 (Thurs.) through Nov. 21 (Fri.) 103.00 Nov. 24 (Mon.) through Dec. 31 (Wed.) 128.00	
1970	
Jan. 2 (Fri) through Oct. 14 (Wed.) 128.00 Oct. 15 (Thurs.) through Dec. 31 (Thurs.) 133.00	
1971	
Jan. 4 (Mon.) through Dec. 31 (Fri.)	
1972	
Jan. 3 (Mon.) through Sept. 1 (Fri.) 133.00 Sept. 5 (Tues.) through Dec. 29 (Fri.) 153.00	
1973	
Jan. 2 (Tues.) through Dec. 31 (Mon.)	
1974	
Jan. 2 (Wed.) through Jan. 3 (Thurs.). 153.00 Jan. 4 (Fri.) through May 15 (Wed.). 162.00 May 16 (Thurs.) through May 22 (Wed.). 162.00-185.00 May 23 (Thurs.) through June 27 (Thurs.) 162.00 June 28 (Fri.) through Dec. 20 (Fri.). 185.00 Dec. 23 (Mon.) through Dec. 31 (Tues.). 201.00)
1005	
1975	
Jan. 2 (Thurs.) through Aug. 29 (Fri.) 201.00 Sept. 2 (Tues.) through Dec. 31 (Wed.) 220.00	
1976	
Jan. 2 (Fri.) through Sept. 30 (Thurs.) 220.00 Oct. 1 (Fri.) through Dec. 31 (Fri.) 241.00	
1977	
Jan. 3 (Mon.) through Apr. 6 (Wed.) 241.00 Apr. 7 (Thurs.) through Apr. 28 (Thurs.) 235.00-241.00 Apr. 29 (Fri.) through July 25 (Mon.) 241.00 July 26 (Tues.) through Dec. 30 (Fri.) (2)	
1978³	
Jan. 3 (Tues.) through Mar. 31 (Fri.) 206.00-208.00 Apr. 3 (Mon.) through May 30 (Tues.) 210.00 May 31 (Wed.) through July 5 (Wed.) 208.00-210.00 July 6 (Thurs.) through Aug. 31 (Thurs.) 208.00 Sept. 1 (Fri.) through Sept. 15 (Fri.) 200.00-208.00 Sept. 18 (Mon.) through Nov. 16 (Thurs.) 200.00-205.00 Nov. 17 (Fri.) 193.00 Nov. 20 (Mon.) through Nov. 29 (Wed.) 193.00-205.00 Nov. 30 (Thurs.) through Dec. 29 (Fri.) 193.00-200.00)
¹ Basic spot price for electrolytic nickel cathodes in the United States.	

¹ Basic spot price for electrolytic nickel cathodes in the United States.

 July 26 through Oct. 19
 211.00-220.00

 Oct. 20 through Dec. 1
 207.00-213.00

 Dec. 2 through Dec. 30
 206.00-208.00

²INCO announced on July 25, 1977, that it had rescinded its price increase of Oct. 1, 1976, and henceforth "the prices INCO charges its customers will be considered as confidential business information." Quotations for the remainder of the year were:

³ Estimated weekly market prices through Aug. 8, 1978. Thereafter, consumer buying quotation, reflecting actual price in the market.

Daily zinc quotations, 1973-78—"Domestic special high grade delivered"
[In U.S. cents per avoirdupois pound]

*//2
Jan. 2 (Tues.) through Jan. 17 (Wed.).19.00-19.55Jan. 18 (Thurs.) through Jan. 19 (Fri.)19.00-20.00Jan. 22 (Mon.) through Jan. 24 (Wed.).19.50-20.50Jan. 25 (Thurs.) through Jan. 29 (Mon.)20.20-20.50Jan. 30 (Tues.) through Feb. 1 (Thurs.)20.00-20.50Feb. 2 (Fri.) through Mar. 8 (Thurs.)20.20-20.50Mar. 9 (Fri.) through Mar. 20 (Tues.)20.20-21.50Mar. 21 (Wed.) through Mar. 22 (Thurs.)20.25-21.50Mar. 23 (Fri.) through Mar. 27 (Tues.)20.50-21.50Mar. 28 (Wed.) through Dec. 7 (Fri.)21.25-21.50Dec. 10 (Mon.) through Dec. 11 (Tues.)21.25-33.00Dec. 12 (Wed.) through Dec. 31 (Mon.)28.50-33.50
1974
Jan. 2 (Wed.) through Jan. 14 (Mon.) 28.50-33.50 Jan. 15 (Tues.) through Jan. 31 (Thurs.) 32.50-33.50 Feb. 1 (Fri.) through Feb. 7 (Thurs.) 33.00-33.50 Feb. 8 (Fri.) through Mar. 14 (Thurs.) 33.50 Mar. 15 (Fri.) through Mar. 21 (Thurs.) 33.50-36.50 Mar. 22 (Fri.) through Mar. 27 (Wed.) 32.80-42.00 Mar. 28 (Thurs.) 33.50-36.50 Mar. 29 (Fri.) through July 9 (Tues.) 36.50 July 10 (Wed.) through July 23 (Tues.) 36.50-41.50 July 24 (Wed.) through Dec. 31 (Tues.) 39.00-41.50
1000
1975
Jan. 2 (Thurs.) through Feb. 20 (Thurs.). 39.00-41.50 Feb. 21 (Fri.) through Feb. 24 (Mon.) 39.00-39.50 Feb. 25 (Tues.) through Oct. 9 (Thurs.) 39.50 Oct. 10 (Fri.) through Oct. 29 (Wed.) 39.50-41.50 Oct. 30 (Thurs.) through Dec. 31 (Wed.) 39.50
1976
Jan. 2 (Fri.) through Jan. 5 (Mon.)39.50Jan. 6 (Tues.) through Jan. 7 (Wed.)37.50-39.50Jan. 8 (Thurs.) through Aug. 12 (Thurs.)37.50Aug. 13 (Fri.) through Aug. 19 (Thurs.)37.50-40.50Aug. 20 (Fri.) through Aug. 27 (Fri.)40.00-40.50Aug. 30 (Mon.) through Oct. 14 (Thurs.)39.50-40.50Oct. 15 (Fri.) through Dec. 31 (Fri.)37.50
1077
1977
Jan. 3 (Mon.) through May 16 (Mon.) 37.50 May 17 (Tues.) 34.50-37.50 May 18 (Wed.) through Oct. 4 (Tues.) 34.50 Oct. 5 (Wed.) through Nov. 7 (Mon.) 31.00-32.50 Nov. 8 (Tues.) through Dec. 30 (Fri.) 31.00

Daily zinc quotations, 1973-78—"Domestic special high grade delivered"—Continued

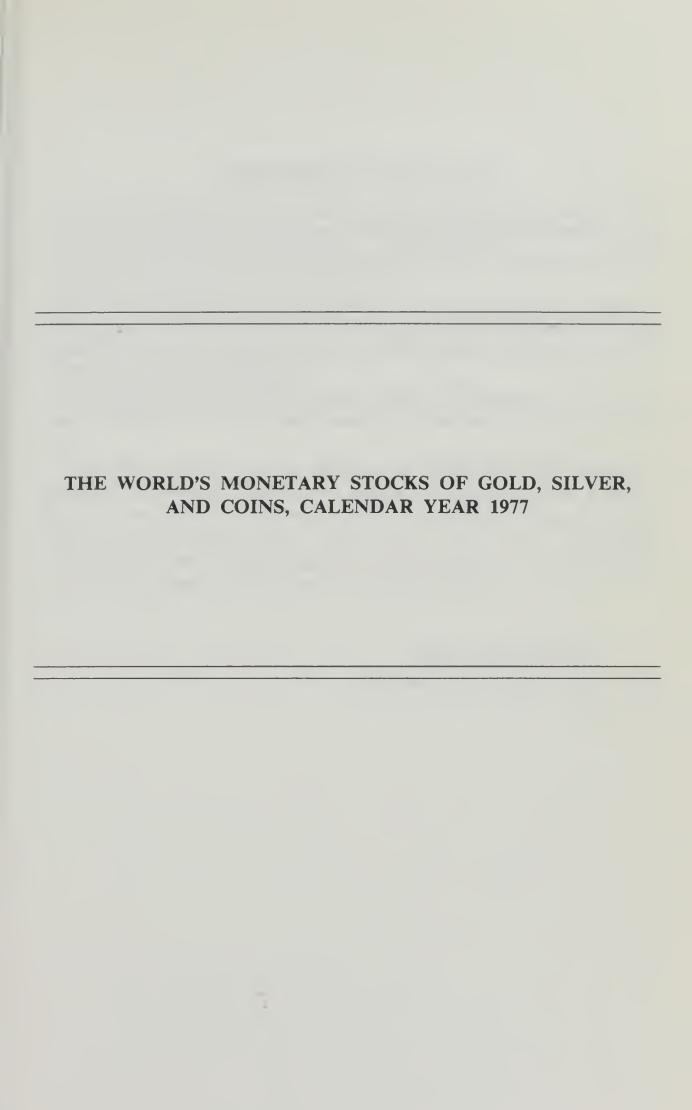
[In U.S cents per avoirdupois pound]

1978

Jan. 3 (Tues.) through Feb. 17 (Fri.)	31.00
Feb. 21 (Tues.) through Mar. 8 (Wed.)	29.50-31.00
Mar. 9 (Thurs.) through June 7 (Wed.)	
June 8 (Thurs.) through June 19 (Mon.)	
June 20 (Tues.) through July 7 (Fri.)	29.50-31.50
July 10 (Mon.) through Aug. 11 (Fri.)	31.00-31.50
Aug. 14 (Mon.)	
Aug. 15 (Tues.) through Aug. 17 (Thurs.)	32.50-33.00
Aug. 18 (Fri.) through Oct. 3 (Tues.)	33.00
Oct. 4 (Wed.) through Oct. 10 (Tues.)	33.00-35.00
Oct. 11 (Wed.) through Oct. 18 (Wed.)	34.00-35.00
Oct. 19 (Thurs.) through Oct. 24 (Tues.)	33.00-35.00
Oct. 25 (Wed.) through Nov. 1 (Wed.)	34.00-35.00
Nov. 2 (Thurs.) through Dec. 29 (Fri.)	35.00

SOURCE.—American Metal Market.







Acknowledgment of Source Data

The United States Mint gratefully acknowledges the generous and continuing cooperation of the many foreign governments which respond to its interrogatories. The official data contributed by these governments have been incorporated in this publication.

Particular appreciation is expressed to those governments which sent photographs of their coinage for this Report. Future editions will include illustrations of the coinage of other countries made available to the U.S. Mint with their interrogatories.

The assistance of the Department of State, Washington, D.C., and its posts overseas in receiving and transmitting the data is deeply appreciated.

Additional sources of data include the publications and releases of central banks, foreign government mints, treasuries, or other monetary agencies, and the international monetary institutions. Nongovernment sources include bullion firms, mining, and various trade organizations.

Statistics on the world production of gold and silver are provided by the U.S. Department of the Interior, Bureau of Mines.

STELLA B. HACKEL,

Director of the United States Mint.



CONTENTS

	Page
Government Coinage Mints of the World	110
Summary—coinage of nations, 1977	112
Coinage of Nations and World Coins, 1977:	
Explanatory notes on tables	115
Details on Coinage: Country tables	116
World monetary units in 1977	242
Silver coins withdrawn from circulation, 1977	250
Gold and silver consumed for industrial, professional, and artistic purposes, 1977	250
World production of gold, 1975–1977	252
World production of silver, 1975–1977	253
World monetary stocks of gold bullion and coin at end of 1977	255
World monetary stocks of silver bullion and coin at end of 1977	256
FAO national coin issues, through Dec. 31, 1977	260

Government Coinage Mints of the World

Country	Name of mint	Address
United States	Office of Director of the Mint	Department of the Treasury, Washington,
Do	Philadelphia Mint	D.C. 20220. Independence Mall, Philadelphia, PA. 19106.
Do	Denver Mint	320 W. Colfax St., Denver, CO. 80204.
Do	San Francisco Assay Office (minting operations).	155 Hermann St., San Francisco, CA. 94102.
Do	Fort Knox Bullion Depository (gold storage, etc.).	Fort Knox, KY. 40121.
Do	New York Assay Office (electrolytic refining of gold and silver, etc.).	32 Old Slip, New York, N.Y. 10005.
Do	storage, minting operations).	West Point, N.Y. 10996.
Afghanistan Argentina	Afghan National Mint	Baricote, Kabul. Avenida Antartida Argentina s/n°, Buenos Aires.
Austria	Royal Australian Mint	Deakin, A.C.T. 2600. Postfach 225, A-1031 Vienna. Boulevard Pachéco 32, B-1000 Bruxelles.
	Casa de la Moneda de Potosi	Potosi. Praca da República, 173, Rio de Janeiro.
Canada	Royal Canadian Mintdo	Vanier, Ontario, KIA OG8. Winnipeg, Manitoba.
China, Republic of.	Casa de Moneda de Chile	Quinta Normal, Santiago. 19 Sichiu Rd., Kweishan, Taoyuan 333, Taiwan.
Colombia	Casa de Moneda	Calle 11, No. 4-93, Bogotá. Mennicy, Kremnica, CSSR. Solmarksvej 5, 2600 Glostrup. Cairo.
	Suomen Rahapaja	Katajanokanlaituri 3, SF-00160 Helsinki 16.
France	Administration des Monnaies et Médailles.	11, Quai Conti 75270, Paris CEDEX06.
Do	Monnaie de Paris Etablissement de Pessac.	Pessac.
Germany, East	Staatsmünzamt Deutsche Demokratischen Republik.	Berlin, DDR.
Germany, Federal Republic of.	Bayerisches Hauptmünzamt	Hofgraben 4, 8 Munchen 1.
Do	Staatliche Münze (new mint)	Taubenheimstrasse 77, 7 Stuttgart 50 (Bad Cannstatt).
	Staatliche Münze Hamburgische Münze	Stephanienstrasse 28, 75 Karlsruhe. Nordestrasse 66, 2 Hamburg 1.
	Greek Mint	Athens. Avenida de Petapa No. 43-81, Zona 12, Guatemala City.
	Állami Pénzverde	1450 Budapest, Ülloi Út 102 Pf. 6. Bombay-400 023 Alipore, Calcutta.
	Perum Peruri	Hyderabad, Andhra Pradesh. Jalan Palatehan No. 4, Blok 5,
IrelandIsrael	Currency Centre	Kebayoran Baru, Jakarta. Avenue Saltanatabad, Tehran. Sandyford Co., Dublin. Myriam HaHashmonait St., Jerusalem. Via Principe Umberto, 4, Rome.

Government Coinage Mints of the World-Continued

Country	Name of mint	Address
Japan	Mint Bureau	1-79, Tenma 1-chome, Kita-ku, Osaka, 530.
Do	Tokyo Branch	3277, 1 chome, Nishisugamo, Toshima-ku, Tokyo-to, Tokyo.
Do	Hiroshima Branch	Itsukamachi, Saheki-gun, Hiroshima Prefecture.
Do	Kumamoto Sub-branch (refining, etc.)	Shinminami, Sendanbata-cho Kumamoto City, Kumamoto Prefecture.
Korea, Republic of	Kyeongsan Mint, Government Printing & Mint Agency.	Aplyang-Myeon, Kyeongsan, Kyeongsangbukdo.
Malaysia	Kilang Wang	Bank Negara, P.O. Box 1, Sungei Renggam, Shah Alam, Selangor.
Malta Mexico	Order of Malta Mint	Via Condotti, Rome, Italy. Calle de Apartado No. 13, Mexico 1, D.F.
Do	Casa de Moneda (new)	Calź. Legaria No. 631, Mexico 10, D.F. Bhimsenstambha, Kathmandu. Leidseweg 90, Utrecht, P.O. Box 2407. P.O. Box 3053, Victoria Island,
Norway	Co., Ltd. Den Kongelige Mynt Pakistan Mint Casa Nacional de Moneda Mennica Panstwowa. Casa da Moeda	Lagos. Postboks 53, N-3601, Kongsberg. Baghban Pura, Lahore (Punjab). Jiron Junin 791, Lima. ul. Pereca 21, 00-958 Warsaw. Avenida Dr. Antonio Jose de Almeida,
Romania	State Mint, Socialist Republic of Romania Chartered Industries of Singapore, Ltd	Lisbon 1. Treasury Dept., Bucarest. 249 Jalan Boon Lay, Jurong, Singapore, 22.
South Africa, Republic of.	South African Mint	P.O. Box 464, Pretoria, 0001.
Spain. Sudan. Sweden. Switzerland. Thailand. Turkey. United Kingdom. Do.	Fabrica Nacional de Mondea y Timbre Sudan Mint	Jorge Juan 106, Madrid 9. P.O. Box 5043, Khartoum South. Box 401, S631 06 Eskilstuna 1. 28, Bernastrasse, Bern 3003. Pradiphat Road, Bangkok. Yildiz Besiktas, Istanbul. Tower Hill, London, E.C. 3. Llantrisant, County of Glamorgan, Wales.
U.S.S.RYugoslavia	Leningrad Mint	Leningrad, Russia. Bulevar, Rivalucije No. 15, Beograd.

Summary—Coinage of nations, calendar year 1977 1

Country	Total coins manufactured	Gross weight of coins
	Pieces	Short tons
United States of America	11,541,091,208	44,145.38
Argentina	318,531,690	2,228.58
Australia	452,111,094	2,455.76
Austria	132,062,600	810.32
Bahamas	3,206,576	12.73
Bahrain	5,488,752	23.51
Bangladesh	196,000,000	433.04
Barbados	10,800	(*)
Belgium	222,150,000	1,108.10
Belize	2,625,000	6.83
Bermuda	2,500,000	9.61
Botswana	1,751,175	13.27
Brazil	710,891,000	3,975.32
Brunei	2,544,000	10.79
Canada	773,411,300	2,957.13
Cape Verde	745	(*)
Cayman Islands	1,179,018	5.11
Chile	146,100,000	797.74
China, Republic of (Taiwan)	171,060,000	1,315.39
Colombia	162,237,860	1,206.00
Costa Rica	63,323,481	261.34
Cyprus	5,452,476	43.29
Denmark	200,869,161	794.82
Dominican Republic	10,000	.70
Ecuador	72,000,000	449.74
Egypt, Arab Republic of	18,250,129	80.86
El Salvador	115,526,400	430.03
Ethiopia	277,108,800	888.61
Falkland Islands	113,164	3.30
Fiji	6,475,000	24.88
Finland	132,891,000	288.13
France	828,610,500	4,597.71
French Polynesia	2,000,000	3.86
Gambia, The	5,819,107	17.96
Germany, Federal Republic of	1,526,159,263	5,663.84
Gibraltar	78,785	2.45
Greece	134,233,000	848.40
Guatemala	57,000,000	153.22
Guernsey	1,972,700	19.16
Guinea-Bissau	2,324,000	15.36
Guyana	8,049,430	31.05
Haiti	100	(*)
Hong Kong	61,934,500	329.88
Hungary	95,248,000	177.06
Iceland	13,200,000	28.22
India	1,205,099,500	3,840.57
Indonesia	121,046,400	781.29
Iran (year ended Mar. 21, 1978)	225,600,414	995.42
Iraq	20,200,000	91.00
Ireland	32,694,000	193.26
Israel	125,016,611	439.67
Italy	662,769,752	4,481.95
Jamaica	2,400,000	7.46
Japan	3,318,000,000	12,773.03
Jersey	286,600	8.93
Jordan	10,114,495	91.54
Kenya	17,280,000	132.93
Korea	63,000,000	215.69
Kuwait	17,700,000	72.75
Liberia	21,813	(*)
Libya	16,322,500	88.40

Footnotes at end of table.

Summary—Coinage of nations, calendar year 1977 1—Continued

Country	Total coins manufactured	Gross weight of coins
	Pieces	Short tons
Luxembourg	2,000,000	13.23
Madagascar, Republic of	12,350,000	52.86
Malawi	15,000,000	39.24
Malaysia	166,903,385	805.54
Maldive Republic	30,000	.78
Malta .	1,500,000	17.79
Mauritius	18,186,801	101.27
Mexico.	832,619,000	5,180.11
	5,551	(*)
Mongolia	55,020,900	226.62
Morocco		329.11
Nepal	69,819,412	
Netherlands	258,000,000	824.5.
Netherlands Antilles	8,910,532	31.09
New Caledonia	2,000,000	3.86
New Zealand	34,542,929	247.4.
Nicaragua	18,103	(*)
Nigeria	127,644,000	630.56
Norway	143,404,850	587.00
Oman	25,866	.88
Pakistan	167,994,772	396.19
Panama	11,099,261	43.89
Peru	115,315,000	499.14
Philippines	1,753,852	6.67
Portugal	111,497,280	609.29
R hodesia.	43,175,500	п.а
Rwanda.	53,002,000	345.03
San Marino.	3,571,600	25.82
Saudi Arabia	10,000,000	110.23
Sierra Leone	962	(*)
	70,160,000	295.92
Singapore		
Solomon Islands	13,528,000	104.85
Somali Republic	42,560,000	127.89
South Africa	281,944,206	1,542.49
Spain	446,687,000	2,354.08
Sri Lanka	6,100,000	15.01
Sudan	8,537,926	43.07
Surinam	17,825,963	26.34
Sweden	188,201,599	969.14
Switzerland	69,939,500	265.51
Tanzania	17,005,220	102.00
Thailand	141,217,700	996.02
Tonga	257,000	3.00
Trinidad and Tobago	47,693,570	133.90
Tunisia	2,000	(*)
Turkey	69,079,896	545.68
Turks and Caicos Islands	46,102	1.72
Tuvalu.	2,482	(*)
United Arab Emirates	11,725,950	90.90
	832,220,143	
United Kingdom		5,393.72
Uruguay	66,860,000	285.34
Vatican City	2,434,200	15.00
Venezuela	538,311,447	1,765.64
West African Monetary Union	58,065,000	250.14
Western Samoa	65,050	1.90
Yemen, People's Republic of	2,036,000	20.49
Zaire	6,428	(*)
Total (117 countries)	29,509,057,837	

¹ For details, see tables for individual countries.

* Less than half a short ton.

n.a. Not available.



Coinage of Nations and World Coins, 1977

Explanatory notes on tables

In the country tables which follow the decimal system of money prevails unless otherwise indicated. Under the decimal system, the basic monetary unit generally is divided into 100 subunits. The table "World monetary units" gives the name of the principal currency unit and subunit for each country.

Do or do are abbreviations for ditto, meaning that the information is the same as that appearing immediately above. Numbers in the tables are expressed in figures arranged to conform to usage in the United States, that is, in groups of three figures separated by a comma (,). For example, one thousand is written 1,000 and one million is written 1,000,000. Fractional or decimal parts of a whole number are set off by a period (.). For example, one tenth is written 0.1, one hundredth 0.01, one thousandth 0.001, and so on.

Coinage in 1977: Pieces. —The figures in this column indicate the number of pieces reported as actually manufactured by a coinage mint or mints during the calendar year. Leaders (dots) in this column indicate that no coins of that particular type were reported to have been manufactured in 1977, but earlier issues of the coins may remain in circulation.

Specifications of coins.—Specifications are for a single coin of the stated denomination and, in general, represent standards provided by law, decree, or regulation of the issuing government. However, details concerning tolerances of weight and fineness, and other minting controls and procedures are not published. For uniformity, different units of weight are converted to grams and different units of measure are converted to millimeters. The following conversion factors were used:

Weight units
1 gram = 15.43235639 grains.

l grain=0.0647989182 gram.

Measurement units

1 inch =25.4 millimeters.

1 millimeter = 0.03937 inch.

(Abbreviation for millimeter: mm.)

Gross weight.—This refers to the overall weight of one coin of the specified denomination. Metallic composition.—The proportions of metals are expressed either in percentages (symbol %) with the proportions adding to 100 percent; or, for gold and silver coins, in thousands with the proportions of precious metal and base metal adding to 1,000 parts.

Thickness.—Thicknesses of coins are not prescribed by governmental decree or law as in the case of diameters. Thicknesses cannot be so specified since they vary according to minting practices and other factors relating to coins. Thicknesses in the tables are to be regarded as averages which may vary slightly over or under the figures shown.

Shape of coins.—Coins are round unless otherwise indicated.

UNITED STATES OF AMERICA

U.S. coins produced and in active circulation in 1977

Denomination 1	Coinage in 1977 ²	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Pieces	Grams		mm.	mm.
Dollar: Cupronickel: Regular issue	45,579,006	22.68	3-layer composite coin. Outer cladding 75% copper, 25% nickel bonded to a core	38.10	2.54
Proof coins	3,251,152	22.68	of pure copper.	38.10	2.54
Silver clad coins: ³ Proof	148,608	24.59	3-layer composite coin. Outer cladding 800 parts silver, 200 parts copper, bonded to a core of approximately 209 parts silver and 791 parts copper.	38.10	2.54
Uncirculated Half dollar: Cupronickel:	70,794	24.59		38.10	2.54
Regular issue	75,047,106	11.34	3-layer composite coin. Outer cladding 75% copper, 25% nickel bonded to a core of pure copper.	30.61	2.18
Proof coins Silver clad coins: ³	3,251,152	11.34	do	30.61	2.18
Proof	148,608	11.50	3-layer composite coin. Outer cladding 800 parts silver, 200 parts copper, bonded to a core of approximately 209 parts silver and 791 parts copper.	30.61	2.18
Uncirculated Quarter dollar: Cupronickel:	70,794	11.50	do	30.61	2.18
Regular issue	725,080,978	5.67	3-layer composite coin. Outer cladding 75% copper, 25% nickel bonded to a	24.26	1.70
Proof coins Silver clad coins: ³	3,251,152	5.67	core of pure copper.	24.26	1.70
Proof	148,608	5.75	3-layer composite coin. Outer cladding 800 parts silver, 200 parts copper, bonded to a core of approximately 209 parts silver and 791 parts copper.	24.26	1.70
Uncirculated	70,794	5.75	do	24.26	1.70
Footnotes at end of table.				1	

UNITED STATES OF AMERICA—Continued

U.S. coins produced and in active circulation in 1977—Continued

Denomination 1	Coinage in 1977 ²	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
D'	Pieces	Grams		mm.	mm.
Dime: Regular issue	1,173,537,228	2.268	3-layer composite coin. Outer cladding 75% copper, 25% nickel bonded to a core of pure copper.	17.91	1.35
Proof coins 5 cents:	3,251,152	2.268	do	17.91	1.35
Regular issue	882,689,472	5.00	75% copper, 25% nickel	21.21	1.98
Proof coins	3,251,152		do	21.21	1.98
Regular issue	8,618,992,300	3.11	95% copper, 5% zinc	19.05	1.57
Proof coins	3,251,152		do	19.05	1.57
Summary: Regular issue Numismatic coins 4	11,520,926,090 20,165,118				
Total	11,541,091,208				

¹ Regular issue coins are for general circulation. Cupronickel (regular) proof coins, packaged in sets of 6 coins and dated 1977, were sold by the Mint. Silver clad coins, proof and uncirculated, bore Bicentennial designs and the dates 1776-1976. The regular proof and silver clad coins were made at the U.S. Assay Office, San Francisco. The designs on general circulation and regular proof coins were identical.

² 1977 coinage was manufactured at the Philadelphia and Denver mints and the San Francisco Assay Office.

⁴ Consists of 3,251,152 regular proof sets, 148,608 Bicentennial proof, and 70,794 Bicentennial uncirculated coin sets. * Reeded edges: \$1, 50, 25, and 10-cent coins. Smooth edges: 5 and 1-cent pieces.

Previous issues of U.S. coins outstanding in 1977

Denomination	Year of most recent coinage	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
		Grams		mm.	mm.
Standard silver dollar	1935	26.73	900 silver, 100 copper	38.10	2.90
Half dollar	1966		do	30.61	2.18
Do	1970	11.50	3-layer composite coin. Outer cladding 800 parts silver, 200 parts copper bonded to a core of approximately 209 parts silver and 791 parts copper.	30.61	2.18
Quarter dollar	1966	6.25	900 silver, 100 copper	24.26	1.70
Dime	1966		do	17.91	1.35
5 cents	1945	5.00	56% copper, 35% silver, 9% manganese.	21.21	1.98
Bronze 1 cent	1962	3.11	95% copper with 5% zinc and tin.	19.05	1.57
Steel 1 cent	1943 (1 year only)	2.70	Steel covered with zinc coating not exceeding 0.001 inch.	19.05	1.57

^{*} Reeded edges: \$1, 50, 25, and 10 cents. Smooth edges: 5 and 1 cent pieces.

NOTE.—Coins have not been demonetized, but few, if any, are in active circulation.

⁹ Public Law 93-127, Oct. 18, 1973, authorized the Secretary of the Treasury to mint dollars, half dollars, and quarter dollars with reverse designs emblematic of the Bicentennial of the American Revolution. The same legislation authorized the Secretary of the Treasury to mint 45 million silver clad coins of the same designs for inclusion in special 3-coin proof and uncirculated sets. The manufacture of these coins was terminated in December 1976; however, the numismatic silverclad sets continued to be packaged and sold after 1976. This table reports the Bicentennial sets sold in 1977.



Coinage of the United States of America.

AFGHANISTAN

Denomination	Coinage in 1977	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
5 afghani 2 afghani 1 afghani 50 pul 25 pul Total		5.24 4.09 3.50	90% steel, nickel claddodoSteel, copper cladSteel, brass clad	<i>mm</i> . 27.50 25.00 23.00 21.00 19.00	1.7 1.5 1.7

[•] Plain edges: 50 and 25 pul coins, and 2 afghani. Reeded edges: 5 and 1 afghani coins.

AFRICA, EQUATORIAL STATES

Denomination	Coinage in 1977	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Pieces	Grams		mm.	mm.
500 francs		9.0	Pure nickel	28.0	1.90
100 francs		7.0	do	25.5	1.90
50 francs		4.7	do	21.5	1.80
Do		12.0	75% copper, 25% nickel	31.0	2.21
25 francs		8.0	92% copper, 6% aluminum, 2% nickel.	27.0	2.35
10 francs		4.0	do	23.0	1.70
5 francs			do	20.0	1.70
2 francs		2.2	95% aluminum, 5% magnesium	27.0	2.00
1 franc		1.3	do	23.0	1.70
Total					

^{*} Reeded edges: 50 and 100 francs. Smooth edges: 1, 2, 5, 10, and 25 francs.

NOTE.—Currency area includes Cameroun, Central African Empire, Tchad, Congo (Brazzaville), and Gabon. The currency unit, the CFA Franc (Communauté Financière Africaine), is divided into 100 centimes. The Banque Centrale des Etats de l'Afrique Equatoriale et du Cameroun issues notes and coins.

AFRICA, WEST-See West African Monetary Union

AJMAN—See United Arab Emirates

ALGERIA

Denomination	Coinage in 1977	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Pieces	Grams		mm.	mm.
1 dinar		7.00	75% copper, 25% nickel	25.00	1.80
50 centimes			79% copper, 20% zinc, 1% nickel.	24.00	1.58
20 centimes		4.00	do	22.00	1.50
10 centimes		2.50	do	19.00	1.30
5 centimes		.80	95% aluminum, magnesium, and other metals 5%.	21.00	.99
2 centimes		.60	do	18.00	n.a.
1 centime		.50	do	16.00	1.09
Total					

^{*} Reeded edges: 1 dinar, 50 centimes. Smooth edges: 20, 10, 5, 2, and 1 centimes. n.a. Not available.

AMERICAN SAMOA-U.S. coins circulate in American Samoa

ANDORRA

[Spanish money principal circulating medium in Andorra. French money also circulates]

ANGOLA, PEOPLE'S REPUBLIC OF

Denomination	Coinage in 1977	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Pieces	Grams		mm.	mm.
20 escudos		10.00	720 silver, 280 copper	30.00	1.50
Do		12.00	Pure nickel	30.00	2.10
10 escudos			720 silver, 280 copper	24.00	1.20
Do		9.00	75% copper, 25% nickel	28.00	2.00
5 escudos	• • • • • • • • • • • • • • • •	7.00	do	24.50	2.00
2½ escudos			do	20.00	1.30
1 escudo		8.00	95% copper, 3% zinc, 2% tin.	26.00	2.10
50 centavos		4.00	do	20.00	1.60
20 centavos		4.50	61% copper, 20% zinc, 19% nickel.	23.00	n.a.
Do		3.00	95% copper, 3% zinc, 2% tin.	20.50	1.10
Do			do	18.00	1.20
10 centavos		2.50	61% copper, 20% zinc, 19% nickel.	19.00	n.a.
Do		.50	97.5% aluminum, 2.5% magnesium.	15.00	1.30
5 centavos		1.35	61% copper, 20% zinc, 19% nickel.	15.00	n.a.
Total					

^{*}Serrated edges: 20, 10, 5 and 2½ escudos. Smooth edges: 1 escudo, 50, 20, 10, and 5 centavos. n.a. Not available.

NOTE.—The People's Republic of Angola became an independent nation on Nov. 11, 1975.

ARGENTINA

Denomination	Coinage in 1977 1	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
3,000 pesos ²	Pieces 105,500 105,500 105,500 1,506,000 1,506,000 1,506,000 248,959,106 64,738,084	Grams 25.00 15.00 10.00 6.50 5.75 5.00 6.50 5.75	900 Silver	mm. 38.00 33.00 28.00 25.00 23.50 22.00 25.00 23.50	mm. 2.17 1.73 1.60 1.60 1.60 1.60 1.60 1.60
1 peso	318,531,690	4.35 3.10 2.12 .92	do.	22.00 20.50 18.50 16.50 17.50 15.50	1.60 1.60 1.40 1.20 1.40

¹1977 coinage was produced by Casa de Moneda de la Nacion, Buenos Aires, except for the silver coins which were made by the Government Mint of Chile.

Note.—Argentine Law 18,188 Apr. 15, 1969, authorized the Central Bank of Argentina to issue a new monetary unit not later than Jan. 1, 1970. The new unit designated "peso" as opposed to "peso moneda nacional," is divided into 100 centavos. The legislation provided that new coins in 50, 20, 10, 5, 2, and 1 centavos denominations be issued beginning in January 1970.

Previous issues of Argentine coins outstanding in 1977

Denomination	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
25 pesos (12 sided)	5.0	90% steel, nickel claddodo	<i>mm</i> . 25.50 23.00 21.00	1.8

^{*} Smooth edges: all denominations.

NOTE.—Pursuant to Law 18,188, these coins became equivalent in value to 20, 10, and 5 centavos, respectively.

²Commemorate the 1978 World Cup Soccer Tournment held in Argentina. Coins bore year 1977.

³ Includes coins honoring the bicentennial of the birth of Admiral Guillermo Brown, founder of the Argentine Navy, which bore the dates 1777–1977.

^{*} Smooth edges: 100, 50, 20 pesos; 5 and 1 centavos coins. Reeded edges: All other denominations.









AUSTRALIA

Denomination	Coinage In	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
50 cents ²	Pieces 25,242,849 41,438,849 24,220,849 109,339,849 102,271,849 149,596,849 452,111,094	11.30 5.65 2.83 5.20	75% copper, 25% nickel	mm. 31 51 28.52 23.60 19.41 21.59	mm. 2.64 2.44 1.90 1.45 1.98

¹ Coins for circulation dated 1977. Coinage made at Australian Government Mint, Canberra, and included the following special coin sets: 53,709 1977 proof sets, 103,590 1977 uncirculated sets, and 9,550 1976 uncirculated sets.

NOTE.—Australian coins circulate in Norfolk Island, Nauru, the Territory of Heard and McDonald Islands, the Australian Antarctic Territory, and the Territory of Cocos (Keeling) Islands.

AUSTRIA

Denomination	Coinage in 1977 1	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Pieces	Grams		mm.	mm.
1,000 schillings		13.5	900 gold, 100 copper	27.0	1.60
100 schillings ²	6,049,600	24.0	640 silver, 360 copper	36.0	2.70
50 schillings			900 silver, 100 copper	34.0	2.45
Do		20.0	640 silver, 360 copper	34.0	2.45
25 schillings			800 silver, 200 copper	30.0	2.10
10 schillings		7.5	640 silver, 360 copper	27.0	1.60
Do	6,358,500	6.2	75% copper, 25% nickel	26.0	1.60
			bonded to pure nickel core.		
5 schillings	7,002,000	4.8	75% copper, 25% nickel	23.5	1.40
1 schilling	28,566,000		91.5% copper, 8.5% aluminum	22.5	1.55
50 groschen	8,646,000	3.0	do	19.5	1.50
10 groschen	56,720,000		98.5% aluminum, 1.5%	20.0	1.60
2			magnesium.		
5 groschen	5,841,000	2.5	Zinc	19.0	1.50
2 groschen	2,483,000		98.5% aluminum, 1.5% magnesium.	18.0	1.50
1 groschen	15,000	1.8	Zinc	17.0	1.30
			do	17.0	1.30
Trade coins:					
Maria-Theresia thaler.	10,381,500	28.1	833 1/3 silver, 166 1/3 copper.	39.5	2.50
Total	132,062,600				

¹Coinage by the Austrian Mint, Vienna. All Maria-Theresia thalers were dated 1780. All I groschen coins were dated 1947. Other coins for general circulation were dated as follows:

	1976	1977
10 schillings	2,510,500	3,848,000
5 schillings		6,467,000
1 schilling		19,628,000
50 groschen		7.302.000
10 groschen		53,654,000
5 groschen	4,196,000	1,645,000
2 groschen	599,000	1,884,000

² Consists of 2,000,000 coins commemorating the 500th anniversary of the Hall Mint, Tyrol (dated 1477–1977) 2,000,000 coins commemorating the 900th anniversary of the Hohensalzburg fortress (dated 1977) and 2,000,000 coins commemorating the 1,200th anniversary of the Stift Kremsmünster monastery and church (dated 777-1977). Also includes 2,600 coins commemorating the 200th anniversary of the Burgtheater (dated 1776-1976); 16,000 commemorating the 1,000th anniversary of the province of Carinthia (dated 976-1976); and 31,000 in honor of the 175th anniversary of the birth of writer Johann Nestroy (dated 1976).

² 1977 dated 50 cent coins feature reverse design honoring the Silver Jubilee of Queen Elizabeth 11.

^{*}Smooth edges: 2 and 1 cent coins. Milled edges: All others except the 50 cent piece is 12-sided with a smooth edge.

^{*} Lettered edges: 100, 50, 25 schillings and Maria-Theresia thalers. Smooth edges: 5 and 1 schillings, 10, 2, 1 groschen coins. Reeded edges: 1,000 and 10 schillings, 50 and 5 groschen pieces.















Coinage of Austria

AZORES—Coins of Portugal circulate in the Azores

BAHAMAS

Denomination	Coinage in 1977	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Pieces	Grams			
2.500 4-111	Pieces 86		916.6 gold	<i>mm</i> . 72.00	<i>mm</i> . 6.24
2,500 dollars ¹	495		do	28.00	1.30
150 dollars ²	495		do	24.00	1.40
100 dollars 3	3,094		do	21.00	1.25
Do	3,074		do.	36.00	1.10
50 dollars 4	3,297		do	17.00	.86
Do	5,277		do	28.00	n.a.
20 dollars			do.	22.00	n.a.
10 dollars			do.	19.00	n.a.
Do	4,424		925 silver, 75 copper	50.00	3.12
Do	469		75% copper, 25% nickel	50.00	3.12
5 dollars	1,001		do	45.01	3.20
Do	10,812		925 silver, 75 copper	45.01	3.20
2 dollars	14,782		do	40.01	2.84
Do	1,246		75% copper, 25% nickel	40.01	2.84
l dollar	10,812		800 silver, 200 copper	34.54	2.44
Do	1,313		75% copper, 25% nickel	34.54	2.44
50 cents	1,913		do	29.01	1.98
Do	10,812		800 silver, 200 copper	29.01	1.98
25 cents	13,925		Pure nickel	24.26	2.03
15 cents	15,025	6.48	75% copper, 25% nickel	21.59	2.06
10 cents	17,525		do	23.50	1.80
5 cents	23,525	3.89	do	21.01	1.52
1 cent	3,071,525	3.11	79% copper, 20% zinc,	19.05	1.42
Total	3,206,576		1% nickel.		

1977 coinage was made by the Royal Canadian Mint, the Royal Mint, United Kingdom, and the Franklin Mint, Pennsylvania. All coins in denominations of \$10 through 1 cent were dated 1977 and were produced by the Franklin Mint, except for 3 million 1-cent coins which were made by the Royal Mint, United Kingdom. The succeeding footnotes identify production of higher denominations.

- ¹ Coins manufactured by the Royal Canadian Mint. 76 were dated 1974, the remainder 1977.
- ² 168 coins, made by the Royal Canadian Mint, were dated 1976. Remainder, made by Valcambi, S.A., Switzerland, bore the year 1977.
- ³ Of the 1,106 coins manufactured by the Royal Canadian Mint, 1,071 were dated 1976, 35 bore 1977; the balance of the coins were struck by Valcambi, S.A.
- *2.207 coins produced by the Royal Canadian Mint, dated 1976; the remainder of the coins were made by Valcambi, S.A., and dated 1977.
 - * Smooth edges: 1, 5, 10, and 15 cent coins. Reeded edges: All other denominations. n.a. Not available.

BAHRAIN

Denomination	Coinage in 1977 ¹	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Pieces	Grams		mm.	mm.
100 dinars		16.00	916 ² / ₃ gold, 83 ¹ / ₃ copper	28.40	n.a.
500 fils	1,719	18.14	800 silver, 200 copper	34.54	n.a.
250 fils	1,719	15.00	75% copper, 25% nickel	32.00	2.34
100 fils	2,001,719	6.50	do	25.00	n.a.
50 fils	1,601,719	3.10	do	20.00	n.a.
25 fils	1,876,719	1.75	do	16.51	1.19
10 fils	1,719	4.75	97% copper, 2.5% zinc, 0.5% tin.	23.50	1.47
5 fils	1,719	2.00	do	18.50	.84
1 fil	1,719		do	15.00	n.a.
Total	5,488,752				

¹⁹⁷⁷ coinage, produced by mints in the United Kingdom, bore the date 1385 (1965), and included 1,719 proof coins of each denomination.

^{*} Milled edges: 100 dinars, 500, 250, 100, 50, and 25 fils. Smooth edges: 10, 5, and 1 fils.

n.a. Not available.



BANGLADESH

Denomination	Coinage in 1977 ¹	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
1 taka	Pieces 12,700,000 45,300,000 48,000,000 90,000,000	4.00 2.65 2.00	Cupronickel Stainless steeldo. Aluminum with 2.8% magnesiumdododo	mm. 26.00 22.00 19.00 (2) 3 18.80 16.00	mm. 1.52 1.40 2.12 1.62 n.a.
Total	196,000,000				

¹ 1977 coinage, produced by the Royal Canadian Mint, was dated 1977.

Previous issues of Bangladesh coins in circulation in 1977

Denomination	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Grams		mm.	mm.
1 rupee	11.55	Nickel	27.94	n.a.
50 poisha	4.00	Copper, nickel, zinc alloy	22.00	n.a.
Do	5.00	75% copper, 25% nickel	22.00	n.a.
25 poisha	4.00	do	20.00	n.a.
10 poisha	4.00	do	(1)	n.a.
5 poisha	3.00	79% copper, 20% zinc,	(²)	n.a.
2 poisha	2.25	97% copper, 2.5% zinc, 0.5% tin.	(3)	n.a.
Do	.75	99.75% aluminum, 0.25% copper.	(4)	n.a.
1 poisha	1.50	97% copper, 2.5% zinc, 0.5% tin	17.00	n.a.
Do	.60	Aluminum	17.00	n.a.

¹ 12 scallops with outer diameter 22 mm. and inner diameter 20.8 mm.

²8 scallops: Outer circle 24 mm.; inner circle 21.40 mm.

³ Square coin.

^{*} Reeded edges: 50 and 25 poisha coins. Smooth edges: 10, 5 and 1 poisha coins.

n.a. Not available.

² Square coin with rounded corners measuring 21 mm. diagonally and 18.06 mm. across flats.

³ Scalloped coin with outer diameter 18 mm. and inner diameter 17.05 mm.

^{*}Scalloped coin with outer diameter 18 mm. and inner diameter 17.6 mm.
*Smooth edges: 5 and 1 poisha coins. Serrated edges: 50 and 25 poisha coins. Waved edges: 10 and 2 poisha coins. Milled edges: 1 rupee.

n.a. Not available.

BARBADOS

	Denomination	Coinage in 1977 ¹	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
		Pieces	Grams		mm.	mm.
100	dollars		6.34	500 gold	26.16	1.50
10	dollars		38.00	925 silver	42.00	n.a.
	Do	600		75% copper, 25% nickel	42.00	3.00
5	dollars		32.10	800 silver	40.00	n.a.
	Do	600	28.34	75% copper, 25% nickel	40.00	2.50
2	dollars	600		do	36.00	2.50
1	dollar	600	10.00	do	28.50	2.00
25	cents	2,100	5.65	do	23.60	1.50
10	cents	2,100	2.26	do	17.78	1.00
5	cents	2,100	3.75	80% copper, 20% zinc	21.00	1.50
1	cent	2,100	3.11	98% copper, 1.5% zinc, 0.5% tin.	19.00	1.50
	Total	10,800				

¹ Coinage was made by the Franklin Mint. All coins were dated 1977.

BELGIUM

Denomination	Coinage in 1977 1	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
250 francs ²	Pieces 150,000 14,000,000 45,000,000 137,000,000 26,000,000	8.00 6.00 4.00	835 silver, 165 copper	mm. 37 27 24 21 19	<i>mm</i> . 2.30 2.00 1.75 1.55 1.30

¹ The 1977 coinage, made by the Belgian Government Mint, was dated 1977.

Other Belgian coins in active circulation during 1977

Denomination	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
100 francs "Dynastie"		835 silver, 165 copper	<i>mm</i> . 33	<i>mm</i> . 2.30 1.20

^{*} Milled edge: 100 francs. Smooth edge: 25 centimes.

NOTE.—The 50 F coin was demonetized Feb. 22, 1974.

n.a. Not available.

^{*} Smooth edges: \$1, 5 and 1 cent coins. Reeded edges: All other denominations.

² Coins commemorating the 25th anniversary of the reign of King Baudoin were dated 1951-1976.

^{*} Milled edges: 5 and 1 franc. Smooth edges: 10 francs and 50 centimes. Engraved edge: 250 francs.

BELIZE (formerly British Honduras)

Denomination	Coinage in 1977 ¹	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Pieces	Grams		mm.	mm.
50 cents	125,000	9.07	75% copper, 25% nickel	27.74	n.a.
25 cents	500,000	5.66	do	23.60	n.a.
10 cents	250,000	2.40	do	17.00	n.a.
5 cents		3.63	79% copper, 20% zinc, 1% nickel.	20.19	1.32
Do	1,000,000	1.04	Aluminum	20.19	n.a.
1 cent		2.59	97% copper, 2.5% zinc, 0.5% tin.	19.51	1.04
Do	750,000	.79	Aluminum	19.51	n.a.
Total	2,625,000				

¹ 1977 coinage, made by mints in the United Kingdom, was dated 1976.

BENIN, PEOPLE'S REPUBLIC OF -See West African Monetary Union

BERMUDA

Denomination	Coinage in 1977 ¹	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
100 dollars 25 dollars Do 20 dollars 1 dollar Do Do 50 cents 25 cents 10 cents 5 cents	Pieces 500,000	7.03 48.30 41.80 7.99 28.28 28.28 12.64 5.96 2.43	900 gold 925 silver, 75 copper 75% copper, 25% nickel 916.6 gold 925 silver, 75 alloy 500 silver, 500 alloy 800 silver, 200 alloy 75% copper, 25% nickel do do do do	mm. 24.25 48.00 48.00 22.05 38.00 38.61 30.61 24.26 17.91 21.21	<i>mm</i> . 1.40 3.27 3.27 1.47
1 cent	2,500,000		97% copper, 2.5% zinc, 0.5% tin.	19.05	1.47

¹ 1977 coinage was produced by mints in the United Kingdom and was dated 1977.

^{*} Milled edges: 50, 25, and 10 cents. Smooth edges: 5 and 1 cent pieces.

n.a. Not available.

^{*} Serrated edges: \$100, \$25, \$1, 50, 25, and 10 cents. Smooth edges: 5 and 1 cent pieces. n.a. Not available.



Coinage of Bolivia

BHUTAN

Denomination	Coinage in 1977	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Pieces	Grams		mm.	mm.
30 ngultrums		25.00	500 silver, 400 copper, 50 nickel, 50 zinc.	39.00	n.a.
15 ngultrums		22.50	do	39.00	3.00
1 ngultrum		n.a.	n.a	n.a.	n.a.
25 chetrums		n.a.	n.a	n.a.	n.a.
20 chetrums		4.50	92% copper, 6% aluminum, 2% nickel.	22.00	1.85
10 chetrums		2.30	96% aluminum, 4% magnesium	26.00	n.a.
5 chetrums		n.a.	n.a	n.a.	n.a.
Total					

n.a. Not available.

NOTE.—Coins of India also circulate in Bhutan.

BOLIVIA

Denomination	Coinage in 1977	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
500 peso-bolivianos 250 peso-bolivianos 100 peso-bolivianos 5 peso-bolivianos 1 peso-boliviano 50 cents 25 cents 20 cents 10 cents 5 cents	Pieces	15.00 10.00 8.50 6.00 4.00 3.50 3.00 2.50	933 silver, 67 copperdo	mm. 34.00 30.00 26.00 30.00 27.00 24.00 22.50 21.50 19.00 16.00	mm. 1.00 1.00 1.00 1.00 n.a. 1.57 1.40 1.35 1.30 1.38 1.32
Total					

^{*} Serrated edges: 500, 250, 100, 5, and 1 peso-boliviano coins. Smooth edges: Other denominations. n.a. Not available.

BOTSWANA

Denomination	Coinage in 1977 ¹	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Pieces	Grams		mm.	mm.
150 pula		15.98	916.6 gold	28.40	n.a.
5 pula ²	1,025		925 silver	38.60	n.a.
1 pula(12 scallops)	500,000	10.30	75% copper, 25% nickel	29.50	2.17
50 thebe	250,150		do	28.50	2.35
25 thebe	250,000	5.73	do	25.00	1.55
10 thebe	500,000	3.83	do	22.00	1.39
5 thebe	250,000	2.70	97% copper, 2.5% zinc,	19.50	1.27
			0.5% tin.		
1 thebe		.70	Aluminum	18.50	1.27
Total	1,751,175				

¹ 1977 coinage, manufactured by mints in the United Kingdom, was dated 1977, except for the 5 pula coins and 150 of the 50 thebes which were dated 1976.

^{*} Serrated edges: 15 ngultrums and 20 chetrums.

²Commemorate the 10th anniversary of Botswana's independence and bear the date 1966-1976. Includes 1,000 proof coins.

^{*} Smooth edges: 1 pula. Reeded edges: All other denominations.

n.a. Not available

Note.—First distinctive Botswana coins were issued Aug. 23, 1976. Botswana previously used South African currency and coin.

BRAZIL

	Denomination	Coinage in	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
		Pieces	Grams		mm.	mm.
300	cruzeiros		16.65	920 gold	27.50	1.80
20	cruzeiros			900 silver	34.10	2.10
10	cruzeiros		11.30	800 silver, 200 copper	28.00	1.80
1	cruzeiro			Pure nickel	29.00	1.70
	Do	98,000	10.25	75% copper, 25% nickel	29.00	1.70
50	centavos		7.71	do	27.00	1.50
	Do	160,019,000	6.65	Stainless steel	27.00	1.50
20	centavos		6.55	75% copper, 25% nickel	25.00	1.50
	Do	240,001,000	5.67	Stainless steel	25.00	1.50
10	centavos	225,213,000	4.22	do	23.00	1.30
5	centavos,	85,360,000	2.69	do	21.00	1.00
2	centavos	100,000	2.21	do	19.00	1.00
1	centavo	100,000	1.77	do	17.00	1.00
	Total	710,891,000				

¹⁹⁷⁷ coinage, manufactured by the Brazilian Mint, was dated 1977.

BRUNEI

Denomination	Coinage in 1977 ¹	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
10 dollars ²	Pieces 4,000 240,000 640,000 960,000 520,000 180,000	9.33 5.66 2.83 1.41	925 silver, 75 copper	<i>mm.</i> 38.61 27.76 23.60 19.41 16.26 17.78	mm. 1.73 1.45 1.10 .76

¹ Made by mints in the United Kingdom, coins were dated 1977.

BURMA

Denomination	Coinage in 1977	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Pieces		75% copper, 25% nickel	<i>mm</i> . 30.5 26.0	<i>mm</i> . 2.24 1.93
50 pyas		6.80	dodododo	22.5,24.0 19.8,23.4	
5 pyas (Scalloped) 1 pya			95.5% copper, 3% tin, 1.5%	18.5,19.5 18.0	1.55 1.20
Do	-	2.27	21nc. 97% copper, 2.5% zinc, 0.5% tin.	18.0	п.а.

^{*} Type of edge not available.

^{*} Serrated edges: 1 cruzeiro, 50, 20, and 10 centavos. Smooth edges: 5, 2, and 1 centavos coins. Lettered edges: 300, 20, 10, and 1 cruzeiro commemoratives.

n.a. Not available.

² Proof coins, honoring the 10th anniversary of the Brunei dollar, were dated 1977.

^{*} Smooth edge: 1 sen. Reeded edges: All other denominations. n.a. Not available.

n.a. Not available.

BURUNDI

Denomination	Coinage in 1977	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
10 francs		2.17 4.11	75% copper, 25% nickel 97% aluminum, 3% magnesium 70% copper, 30% zinc Aluminum	<i>mm</i> . 28 25 23 19	<i>mm.</i> 1.8 1.6 1.1

^{*} Milled edges: All coins.

CAMBODIA

Denomination	Coinage in 1977	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
1 riel		3.8	75% copper, 25% nickel 95% aluminum, 5% magnesiumdo	<i>mm</i> . 19.38 31.00 27.00	
10 sen			do	23.00	1.56

^{*} Type of edge not available except for 1 riel, which has reeded edge. n.a. Not available.

CANADA

Denomi	nation	Coinage in 1977 ¹	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
		Pieces	Grams		mm.	mm.
100 dollars 2		182,838	16.97	916.6 gold	24.96	2.55
Do			13.34	583.3 gold	27.00	2.15
10 dollars				925 silver	45.00	3.43
5 dollars				do	37.95	2.49
1 dollar 2		866,660	23.33	500 silver, 500 copper	36.07	2.66
Do		1,393,745	15.62	Pure nickel	32.13	2.62
50 cents		709,839	8.10	do	27.13	1.94
25 cents		99,634,555	5.05	do	23.88	1.58
10 cents		128,452,206	2.07	do	18.03	1.19
5 cents		89,120,791	4.54	do	21.21	1.76
1 cent		453,050,666	3.24	98% copper, 1.5% zinc, 0.5%	19.05	1.65
				tin.		
Total		773,411,300				

¹ Coinage produced by the Royal Canadian Mint, Ottawa, was dated 1977.

Previous Issues of Canadian Coins in Circulation in 1977

Denomination	Gross weight	Metallic Composition	Diam- eter	Thickness and edge*
	Grams		mm.	mm.
50 cents	11.66	800 silver, 200 copper	29.72	2.03
25 cents		do	23.88	1.78
Do	5.83	500 silver, 500 copper	23.88	1.78
10 cents	2.33	800 silver, 200 copper	17.91	1.22
Do	2.33	500 silver, 500 copper	21.21	1.22
5 cents		800 silver, 200 copper	21.21	1.78
Do	4.54	88% copper, 12% zinc	21.23	1.78
Do	4.54	Steel	21.21	1.78

^{*} Reeded edges: 50, 25, and 10 cent coins. Smooth edges: 5 cent coins. The 88% copper 5-cent piece is 12-sided.

² Commemorating the Silver Jubilee of Queen Elizabeth II.

^{*} Reeded edges on all denominations except the 5 and 1 cent pieces, which are smooth.

CAPE VERDE, REPUBLIC OF

Denomination	Coinage in 1977 ¹	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Pieces	Grams		mm.	mm.
2,500 escudos	365	8.0	900 gold, 100 silver and copper	22.0	1.63
250 escudos	380	16.5	925 silver, 75 copper	34.0	2.18
10 escudos		5.0	720 silver, 280 copper	24.0	1.20
5 escudos			75% copper, 25% nickel	22.0	1.40
2½ escudos		3.5	do	20.0	1.30
1 escudo		8.0	95% copper, 3% zinc, 2% tin.	26.0	1.80
Do		8.0	61% copper, 20% zinc, 19% nickel.	26.8	1.60
50 centavos		4.5	do	22.8	1.30
Do		4.0	95% copper, 3% zinc, 2% tin.	20.0	1.50
20 centavos			96% copper, 4% zinc	25.0	1.20
10 centavos		4.0	do	22.5	1.20
5 centavos		3.0	do	19.0	n.a.
Total	745				

¹1977 coinage was made by the Portuguese Government Mint and dated 1976. Commemorates the first anniversary of independence. The 250 escudos and 191 of the 2,500 escudos were proof coins.

NOTE.—The Republic of Cape Verde became independent on July 6, 1975.

CARIBBEAN TERRITORIES, EASTERN GROUP

Denomination	Coinage in 1977	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Pieces	Grams		mm.	mm.
4 dollars		28.28	75% copper, 25% nickel	38.61	3.00
50 cents			do	30.10	n.a.
25 cents		6.50	do	24.00	1.98
10 cents		2.60	do	18.10	1.50
5 cents		į.	79% copper, 20% zinc, 1% nickel.	21.00	2.00
2 cents		9.45	95.5% copper, 3% tin, 1.5% zinc.	30.90	1.78
Do		9.45	97% copper, 2.5% zinc, 0.5% tin.	30.90	1.78
1 cent		5.67	dodo	25.50	1.60
Do		5.67	95.5% copper, 3% tin, 1.5% zinc.	25.50	1.60
Total					

n.a. Not available.

^{*}Serrated edges: 2,500, 250, 10, 5, and $2\frac{1}{2}$ escudos. Smooth edges: 1 escudo, 50, 20, 10, and 5 centavos. n.a. Not available.

^{*} Milled edges: \$4, 50, 25, 10 and 5 cents. Smooth edges: 2 cents, and 1 cent pieces.

Note.—The currency area currently includes Greneda, Montserrat and the five Associated States, Antigua, St. Kitts, St. Vincent, St. Lucia, and Dominica.

CAYMAN ISLANDS

Denomination	Coinage in 1977 ¹	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
100 dollars ² 50 dollars ³ 25 dollars Do ⁴ 5 dollars 2 dollars 1 dollar 50 cents 25 cents 10 cents 5 cents	Pieces 5,164 2,400 11,454	64.80 14.32 51.84 35.64 29.81 18.14 10.37 5.67 3.90	500 gold	mm. 34.00 50.00 27.10 45.00 42.00 40.00 35.00 28.50 24.26 20.96 18.00	mm. 2.74 3.76 n.a. 3.17 3.07 2.80 2.13 1.93 1.68 1.62 1.22
1 cent	1,179,018		97% copper, 2.5% zinc, 0.5% tin.	17.00	1.72

¹ 1977 coinage was made by mints in the United Kingdom and dated 1977, except the gold and silver coins which were produced by the Royal Canadian Mint.

CHILE

	Denomination	Coinage in 1977 ¹	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
		Pieces	Grams		mm.	mm.
	system:2					
10	pesos	30,000,000	9.00	70% copper, 15% nickel, 15% zinc.	28.00	1.65
5	pesos	28,300,000	7.00	do	26.00	1.49
1	peso	20,000,000	5.00	do	24.00	1.24
50	centavos	10,000,000		do	22.00	1.18
10	centavos ³		5.00	92% copper, 6% aluminum, 2% nickel.	23.00	1.51
	Do	57,800,000	2.00	100% aluminum	23.00	1.80
5	centavos 3		1.50	do	21.00	1.60
	Do		4.00	92% copper, 6% aluminum, 2% nickel.	21.00	1.45
1	centavo		2.00	100% aluminum	25.00	1.53
	Subtotal	146,100,000				
Escu	do system:					
100	escudos 3		5.00	92% copper, 6% aluminum, 2% nickel.	23.00	1.51
	escudos 3		4.00	do	21.00	1.45
10	escudos		2.00	100% aiuminum	25.00	1.53
	Subtotal					
	Total	146,100,000				

¹ 1977 coinage, produced by the Chilean Government Mint, was dated 1977.

² Consists of 2,319 1976-dated coins honoring the six sovereign queens of Great Britain, (of which 1,455 were believed to be proof), and 2,845 1977-dated proof coins honoring the Silver Jubilee of Queen Elizabeth II.

³ Honoring the six sovereign queens of Great Britain; dated 1976.

⁴ Proof coins honoring the Silver Jubilee of Queen Elizabeth II.

^{*} Reeded edges: \$100, \$50, \$25, \$5, \$2, \$1, 50, 25, and 10 cent coins. Smooth edges: 5 and 1 cent coins. n.a. Not available.

²On Sept. 29, 1975, a new monetary unit, the peso, with fractional unit the centavo, was introduced. I peso is equivalent to 1,000 escudos.

³ 12-sided coins.

^{*} Reeded edges: 10, 5, and 1 peso, 50 centavos. Smooth edges: All others.

CHINA, REPUBLIC OF (TAIWAN)

Denomination	Coinage in 1977 ¹	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Preces	Grams		mm.	mm.
5 dollars	50,260,000	9.50	75% copper, 25% nickel	29.0	2.00
1 dollar	116,900,000	6.00	55% copper, 27% zinc, 18% nickel	25.0	1.60
50 cents	3,900,000	3.70	65% copper, 34% zinc, 1% nickel.	23.0	1.30
20 cents		1.80	Aluminum	22.8	1.63
10 cents		1.15	99% aluminum, 1% magnesium	19.0	1.70
Total	171,060,000				

All coins produced by Central Mint of China

COLOMBIA

Denomination	Coinage in 1977 ¹	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Pieces	Grams		mm.	mm.
Numismatic coins:					
2,000 pesos			900 gold, 100 other metal	(2)	1.50
1,500 pesos			do	27.00	2.50
1,000 pesos		4.30	do	(3)	1.00
Subtotal					
Regular issue:					
5 pesos		10.00	90% steel nickel clad	30.00	2.20
2 pesos	76,661,080		92% copper, 8% nickel	24.50	1.95
1 peso	62,082,860		65% copper, 20% zinc, 15%	25.00	1.92
1 pcso	02,002,000	0.75	nickel.	25.00	1.72
50 centavos 4	10,413,226	4.50	90% steel nickel clad	23.00	1.70
20 centavos	2,053,530	4.50	do	23.00	1.70
10 centavos	8,127,164	2.50	do	18.00	1.45
5 centavos	2,000,000	3.25	90% steel copper clad	21.00	1.55
l centavo	900,000	2.00	do	17.00	1.50
Subtotal	162,237,860				
Total	162,237,860				

¹ All regular issue 1977 coinage bore the year 1977 and was made by Casa de Moneda, Bogota.

^{*} Reeded edges: All denominations.

² Square coin with rounded corners, measuring 21 mm. across flats.

³ Square coin with rounded corners, measuring 17 mm. across flats.

⁴ 12-sided coin.

[•] Reeded edges: All numismatic coins, 1 and 5 pesos, 20, and 10 centavos pieces. Smooth edges: 50, 5, and 1 centavo pieces. Lettered edge: 2 pesos.

COMOROS, REPUBLIC OF

COOK ISLANDS

Denomination	Coinage in 1977	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Pieces	Grams		mm.	mm.
1 dollar		27.22	75% copper, 25% nickel	38.74	3.05
50 cents		13.61	do	31.75	2.36
20 cents		11.31	do	28.58	2.41
10 cents		5.66	do	23.62	1.90
5 cents			do	19.43	1.45
2 cents	,	4.15	97% copper, 2.5% zinc, 0.5% tin.	21.08	1.68
1 cent		2.07	do	17.53	1.29
Total					

^{*} Edges not available.

COSTA RICA

20 colones	Geces 20.00 16.00 12.00 14.00 2,033,077 6,005,001 2,005,001 5,001 3,275,001 1.00	00 Pure nickel	<i>mm.</i> 36.00 33.00 30.00 32.00 29.00 26.00 22.00	mm. n.a. n.a. n.a. 2.28 1.68 1.49
Numismatic coins: 1,500 colones 1,000 colones 500 colones 200 colones 100 colones Do ²	3,323,081	00do	18.00 15.00	1.10
50 colones ²	33.44 149.04 74.52 29.86 14.90 100 35.00 100 31.66 100 25.3 100 28.22 7.44 53.90 43.12 1.50 10.76 4.3	900 gold, 100 copperdododododododo	34.00 60.00 55.00 40.00 30.00 42.00 42.00 38.61 38.61 23.00 60.00 50.00 40.00 28.00 21.00	2.49 n.a. n.a. n.a. n.a. 2.87 n.a. 2.75 n.a. n.a. n.a. n.a. n.a. n.a. n.a. n.a

¹1977 coinage: 28,076 1 colon, dated 1975, and 3,270,000 5 centimos, dated 1976, produced by Guatemala Mint; all others manufactured by Sherritt Mint and Royal Canadian Mint, dated 1977. Includes 5,001 uncirculated sets.

² Manufactured by Royal Mint, London, dated 1974. Part of the World Wildlife Conservation series, calling attention to endangered species of wildlife.

^{*}Lettered edges: 2 and 1 colones, 50, 25, 20 centimos. Reeded edges: All numismatic coins and 10 and 5 centimos. n.a. Not available.

CYPRUS

Denomination	Coinage in 1977 ¹	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Pieces	Grams		mm.	mm.
50 pounds ²	5,300	28.40	916.6 gold, 83.4 copper	15.98	n.a.
1 pound	97,176	28.28	75% copper, 25% nickel	38.61	n.a.
Do ³	25,000	28.28	925 silver, 75 copper	38.61	n.a.
500 mils	300,000	14.14	75% copper, 25% nickel	32.31	2.29
Do 3	25,000	14.14	925 silver, 75 copper	32.31	2.11
100 mils	1,000,000		75% copper, 25% nickel	28.49	2.29
50 mils	1,000,000	5.66	do	23.59	1.73
25 mils	1,000,000		do	19.41	1.32
5 mils	2,000,000	5.67	97% copper, 2.5% zinc, 0.5% tin.	25.48	1.60
1 mil		1.00	91.15% aluminum, 6.8% magnesium, 2.05% other metals.	(4)	1.70
Total	5,452,476				

¹ 1977 coinage was produced by mints in the United Kingdom. All £50, the silver £1 and 500 mils and 100,000 of the cupronickel 500 mils pieces were dated 1977. All others bore 1976.

² Proof coins, honoring the late Archbishop Makarios, former president of Cyprus.

³ Proof coins.

⁴Twelve-sided coin measures 18.3 mm. across the flats.

^{*} Milled edges: £50, £1, 500, 100, 50, and 25 mils. Smooth edges: 5, and 1 mils. n.a. Not available.

CZECHOSLOVAKIA

Denomination	Coinage in 1977 ¹	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Pieces	Grams		mm.	mm.
Commemorative: 2					
100 crowns 3	100,000	15.00	700 silver, 300 copper	33.00	n.a.
50 crowns 4	80,000	13.00	do	31.00	2.20
20 crowns	n.a.	9.00	500 silver, 400 copper, 50 nickel, 50 zinc.	29.00	2.00
Regular issue:					
5 crowns	n.a.	7.00	80% copper, 20% nickel	26.00	1.90
2 crowns	n.a.	6.00	do	24.00	1.90
1 crown	n.a.	4.00	91% copper, 8% aluminum, 1% manganese.	23.00	1.53
50 heller	n.a.	3.00	90% copper, 10% zinc	21.50	1.30
20 heller	n.a.	2.60	79% copper, 20% zinc, 1% nickel.	19.50	1.40
10 heller	n.a.	.90	97.6% aluminum, 2% magnesium, 0.4% manganese.	18.20	2.30
5 heller	n.a.	.80	do	20.00	1.00
Total					

¹Coins were manufactured by Czechoslovak Mint.

n.a. Not available.

Previous issues of Czechoslovakian coins outstanding in 1977

Denomination	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Grams		mm.	mm.
5 crowns	7.00	80% copper, 20% nickel	26.00	1.50
3 crowns		do	23.50	1.35
25 heller	1.43	97.6% aluminum, 2% magnesium,	24.00	1.20
		0.4% manganese.		
10 heller 1	1.18	do	22.00	1.20
3 helier ²	.66	do	18.00	1.00
1 heller	.50	do	16.00	1.00

¹ Demonetized Dec. 31, 1977. Exchangeable by the State Bank until Nov. 30, 1978.

² Commemorative coins valid as legal tender.

³ Coin commemorates the 300th anniversary of the death of Václav Hollar, Czech graphic artist and engraver. The coin bore the date 1677–1977.

⁴ Honors the 126th anniversary of the death of Slovak poet, Ján Kollár.

^{*}Smooth edges: 5 and 10 h. Reeded edges: 1 Kc, 50, and 20 h pieces. Smooth engraved: 20, 5, and 2 Kcs. Lettered edge: 100 Kcs. Edges of other commemoratives vary.

² Demonetized Jan. 31, 1976. Exchanged through Nov. 30, 1976.

^{*&}quot;Smooth, engraved" edges: 5 and 3 Kcs coins. Incused edge: 25 h. Smooth edges: 3 and 1 h coins. Reeded edge: 10 heller.









DENMARK

Denomination	Coinage in 1977 ¹	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
10 kroner	6,885,202 25,684,530 32,238,967 61,994,450 74,066,012	15.00 6.80 4.30 3.00 1.60 3.20 3.60	800 silver	<i>mm.</i> 36.00 33.00 25.50 23.00 18.00 15.50 21.00 19.50 16.00	mm. 2.20 2.35 1.85 1.25 1.58 1.25 1.55 1.47 1.31
Total	200,869,161				

¹ Made at the Royal Mint of Denmark.

DJIBOUTI, REPUBLIC OF

Denomination	Coinage in 1977	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Pieces	Grams		mm.	mm.
100 francs		12.0	75% copper, 25% nickel	30.0	n.a.
50 francs		7.0	do	25.5	n.a.
20 francs		4.0	92% copper, 6% aluminum,	23.5	n.a.
			2% nickel.		
10 francs		3.0	do	20.0	n.a.
5 francs			95% aluminum, 5% magnesium	31.0	n.a.
2 francs			do	27.0	n.a.
1 franc		1.3	do	23.0	n.a.
Total					

^{*} Smooth edges: 10, 5, 2, and 1 franc coins. Reeded edges: 100 and 50 franc coins.

NOTE.—Formerly French Afars and Issas, the Republic of Djibouti was granted independence on June 27, 1977.

DOMINICA-See Caribbean Territories, Eastern Group

DOMINICAN REPUBLIC

Denomination	Coinage in 1977 ¹	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
200 pesos ²	Pieces 3,000	Grams	800 gold	<i>mm</i> . 34.00	mm. 2.80
100 pesos	3,000		900 gold	25.00	1.50
30 pesos		11.70	900 gold, 100 copper	24.30	n.a.
Do 3	7,000	78.00	925 silver	50.00	4.40
10 pesos		28.00	900 silver, 100 copper	40.00	2.80
Do		27.00	do	40.00	2.70
1 peso		26.70	75% copper, 25% nickel	38.10	4.00
Do		26.70	900 gold, 100 copper	38.10	n.a.
50 centavos		12.50	75% copper, 25% nickel	30.63	2.20
25 centavos			do	24.30	1.80
10 centavos		2.50	do	17.90	1.50
5 centavos		5.00	do	21.20	1.90
1 centavo		3.00	95% copper, 4.5% zinc, 0.5%	19.05	1.70
			tin.		
Total	10,000				

¹ Struck by Valcambi, S.A., dated 1977.

² The diameter of central hole is 4.6 mm.

^{*} Reeded edges: 10, 5 and 1 kroner. Smooth edges: All other coins.

n.a. Not available.

² Commemorates the centennial of the death of founding father, Juan Pablo Duarte. Bears commemorative dates 1876–1976, as well as date of coinage 1977. Includes 1,000 proof coins.

³ Honors the 30th anniversary of the Central Bank of the Dominican Republic. Includes 2,000 proof coins.

^{*} Reeded edges: 200, 100, silver 30, and 10 pesos; 50, 25, and 10 centavos. Smooth edges: 1 and 5 centavos coins. Lettered edge: 28 gr. silver 10 peso coin.

n.a. Not available.









DUBAI-See United Arab Emirates

ECUADOR

Denomination	Coinage in 1977 ¹	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
2 sucre	72,000,000	6.50 5.00 3.60 2.75	75% copper, 25% nickel 90% steel, nickel claddododo 75% copper, 25% nickel	mm. 29.00 26.00 23.00 21.00 19.00 17.00	mm. 1.60 1.50 1.50 1.50 1.00

¹1977 coinage, made by mints in the United Kingdom, was dated 1977, except for the 50 centavos which were manufactured by Vereinigte Deutsche Metallwerke, A.G., and dated 1977.

^{*} Reeded edges: 2 and 1 sucre, and 50 centavos. Smooth edges: 20, 10, and 5 centavos. n.a. Not available.









EGYPT, ARAB REPUBLIC OF

Denomination	Coinage in 1977 ¹	Gross weight	Metallic composition	Diam- eter	Thickness and edge *
5 pounds ²	Pieces 63 66 250,000 5,500,000 2,000,000 5,500,000 5,000,000 18,250,129	8.00 15.00 6.00 4.50 3.20	875 gold, 25 silver, 100 copperdo	mm. 33.00 24.00 35.00 27.00 25.00 21.00 18.00	п.а. п.а. п.а.

¹ 1977 coinage was produced at the Mint House, Cairo. Coins were dated 1977.

EIRE-See Ireland, Republic of

EL SALVADOR

Denomination	Coinage in 1977 ¹	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Pieces	Grams		mm.	mm.
250 colones ²	4,400	15.98	916.6 gold, 83.4 copper	28.40	2.00
25 colones 2	22,000		900 silver, 100 copper	37.00	2.50
50 centavos			Pure nickel	20.00	1.65
Do	1,500,000	5.00	do	20.00	2.00
25 centavos	20,000,000	2.50	do	17.90	1.48
10 centavos		7.00	75% copper, 25% nickel	26.00	2.50
Do	24,000,000	7.00	65% copper, 23% zinc, 12% nickel.	26.00	2.00
5 centavos		5.00	75% copper, 25% nickel	23.00	1.63
Do	26,000,000	4.00	65% copper, 23% zinc, 12% nickel.	23.00	2.00
3 centavos		4.00	70% copper, 30% zinc	19.00	2.00
2 centavos		2.50	do	17.00	1.50
1 centavo	40,000,000	1.50	do	15.00	1.40
Total	115,526,400				

¹ 1977 coinage was dated 1977. Production was allocated as follows: the 250 and 25 colones, 50 and 25 centavos were made by mints in the United Kingdom; the 10 and 5 centavos were produced by Vereinigte Deutsche Metallwerke, A.G.; and the 1 centavo coins were manufactured by the Royal Canadian Mint and the Sherritt Mint;

EQUATORIAL GUINEA

Denomination	Coinage in 1977	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
10 eukele		3.40	75% copper, 25% nickeldo	<i>mm</i> . 24.00 21.00 19.00	тт. п.а. п.а. п.а.

^{*} Milled edges.

² Commemorates King Faisal of Saudi Arabia, who was assassinated Mar. 25, 1975.

³ Honors President Anwar Sadat's first term in office.

^{*} Reeded edges: 5 and 1 pound, 10, and 5 piastres. Smooth edges: 10 and 5 milliemes. n.a. Not available.

²Coins mark the annual meeting of the International Development Bank, held in San Salvador in 1977. Design is reproduction of the first coinage struck in El Salvador, bearing the commemorative date 1824, as well as 1977. Production includes 400 proof 250 colones and 2,000 proof 25 colones.

^{*}Smooth edges: 10, 5, and 1 centavos coins. Reeded edges: 50 and 25 centavos coins. Lettered edges: 250 and 25 colones.

n.a. Not available.

n.a. Not available.

ETHIOPIA

Denomination	Coinage in 1977 i	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Pieces	Grams		nını.	mm
50 cents	15,000,000	5.98	75% copper, 25% nickel.	25.00	n.a.
25 cents	20,000,000		do	21.50	n.a.
Do 2		6.80	95% copper, 5% zinc	26.00	1.82
Do 2		6.80	95% copper, 5% zinc and tin	26.00	1.82
10 cents	121,008,800	2.99	79% copper, 20% zinc,	23.00	2.13
			1% nickel.		
5 cents	87,600,000	2.99	do	20.00	1.88
Do		4.02	95% copper, 5% zinc and tin.	20.00	1.88
1 cent		2.85	95% copper, 5% zinc	17.00	1.88
Do		2.85	95% copper, 5% zinc and tin.	17.00	1.88
Do	33,500,000	.57	98% aluminum. 2% magnesium	17.00	n.a.
Total	277,108,800				

¹ Coins, manufactured by mints in the United Kingdom, were dated 1968.

NOTE.—The basic monetary unit of Ethiopia was changed from the dollar to the birr by Monetary and Banking Proclamation No. 99/1976 dd., Sept. 21, 1976. The fractional unit remained the cent.

FALKLAND ISLANDS

Denomination	Coinage in 1977 ¹	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Pieces	Grams		mm.	mm.
5 pounds	158	39.94	916.6 gold	36.02	n.a.
2 pounds	158	15.98	do	28.40	n.a.
1 pound	175	7.99	do	22.05	n.a.
1/2 pound	173	3.99	do	19.30	n.a.
50 pence ²	100,000	28.28	75% copper, 25% nickel	38.61	n.a.
Do 2	2,500	28.28	925 silver, 75 copper	38.61	n.a.
10 pence	5,000		75% copper, 25% nickel	28.50	n.a.
5 pence	5,000	5.66	do	23.60	n.a.
		7.13	97% copper, 2.5% zinc, 0.5% tin.	25.91	n.a.
1 penny		3.56	do	20.32	n.a.
¹/₂ penny			do	17.15	n.a.
Total	113,164				

¹The 1977 coinage, produced by mints in the United Kingdom, was dated 1974, except the 50 pence which bore the years 1952–1977. The gold coins and the silver 50 pence were proof.

² Scalloped coin.

^{*} Milled edges. Cupronickel 50 and 25 cents, 10 cents. Smooth edges, 5 and 1 cents.

n.a. Not available.

² Commemorate the Silver Jubilee of Queen Elizabeth 11.

^{*}Milled edges: 5, 2, 1, ½ pound coins, 50, 10 and 5 pence pieces. Smooth edges: 2 pence, 1, and ½ penny pieces. n.a. Not available.

Note.—Falkland Island coins are legal tender and circulate with coins of the United Kingdom.

FAROE ISLANDS—Use coins of Denmark

FIJI

Denomination	Coinage in 1977	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Pieces	Grams		mm.	mm.
Regular issue: 1					
1 dollar			75% copper, 25% nickel	38.60	3.12
50 cents			do	(2)	2.64
20 cents	402,000		do	28.52	2.41
10 cents	660,000		do	23.60	1.90
5 cents	880,000	2.83	do	19.41	1.45
2 cents	1,502,000	3.89	97% copper, 2.5% zinc, 0.5% tin.	21.08	1.60
1 cent	3,028,000	1.94	do	17.53	1.22
Subtotal	6,472,000				
Numismatic coins:			,		
100 dollars		31.36	500 gold, 500 alloy	38.00	2.74
25 dollars		48.60	925 silver	45.00	3.48
10 dollars 3	3,000	30.50	do	40.00	3.05
1 dollar		28.78	do	38.60	3.12
50 cents		18.00	do	(2)	2.64
20 cents		13.09	do	28.52	2.41
10 cents		6.55	do	23.60	1.90
5 cents		3.28	do	19.41	1.45
2 cents		4.53	do	21.08	1.60
1 cent		2.26	do	17.53	1.22
Subtotal	3,000				
Total	6,475,000				

¹ Regular issue coinage was made by the Royal Australian Mint, dated 1978.

² 12 sided coin measuring 31.51 across flats.

³ Proof coins honoring the Silver Jubilee of Queen Elizabeth II were made by the Royal Australian Mint, dated 1952-1977.

^{*} Smooth edges: 50, 2, and 1 cent coins. Reeded edges: All other denominations.





FINLAND

Denomination	Coinage in 1977 ¹	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Pieces	Grams		mm.	mm.
25 markkaa ²	500,000	26.30	500 silver, 500 copper	37.00	3.00
10 markkaa			500 silver, 450 copper, 50 zinc	35.00	3.10
Do 3	400,000	21.50	500 silver, 500 copper	35.00	3.00
5 markkaa	300,000	8.00	93% copper, 5% aluminum,	26.30	2.05
			2% nickel.		
1 markka		6.40	350 silver, 570 copper, 80 zinc	24.00	1.77
Do	10,076,500		75% copper, 25% nickel	24.00	1.77
50 pennia	8,076,500	5.50	93% copper, 5% aluminum,	25.00	1.90
•			2% nickel.		
20 pennia	10,062,500	4.50	do	22.50	1.90
10 pennia	10,042,500	3.00	do	20.00	1.50
5 pennia	30,552,000	.80	97.5% aluminum, 2.5%	18.00	1.40
·			magnesium.		
Do	1,488,500	2.60	97% copper, 2.5% zinc, 0.5%	18.00	1.40
			tin.		
1 penni		1.60	do	15.80	1.10
Do	61,392,500	.45	97.5% aluminum, 2.5%	15.80	1.10
			magnesium.		
Total	132,891,000				

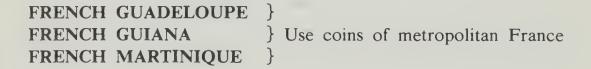
¹ The 1977 coinage, made by the Mint of Finland, bears the date 1977, except for the 25 markkaa which were dated 1978.

FRANCE

Denomination	Coinage in 1977 ¹	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Pieces	Grams		mm.	mm.
50 francs	4,359,000	30.00	900 silver, 100 copper	41.0	n.a.
10 francs	100,027,500	10.00	92% copper, 6% nickel, 2% aluminum.	26.0	2.70
5 francs	460,000	10.00	Pure nickel bonded to core of 75% copper, 25% nickel.	29.0	2.10
1 franc	230,085,000	6.00	Pure nickel	24.0	1.90
1/2 franc	131,644,000	4.50	do	19.5	2.10
20 centimes	100,240,000	4.00	92% copper, 6% aluminum, 2% nickel.	23.5	1.50
10 centimes	140,110,000	3.00	do	20.0	1.50
5 centimes	115,285,000	2.00	do	17.0	1.20
1 centime	6,400,000	1.65	17% chrome steel	15.0	1.50
Total	828,610,500				

¹ The 1977 coinage was made by the French Government Mint, Paris, and bore the year 1977.

^{*}Lettered edges: 50 and 10 francs. Reeded edges: 5, 1, and ½ francs. Smooth edges: 20, 10, 5, and 1 centime coins. n.a. Not available.



² Commemorates the 32d annual World Ski Championships, held in Lahti in February 1978.

³ Marks the celebration of the 60th anniversary of Finland's independence, Dec. 6, 1977.

^{*}Lettered edges: 5 and 1 markka. Reeded edges: 50, 20, and 10 pennia. Smooth edges: 25, 10 markkaa, 5, and 1 pennia.









FRENCH POLYNESIA

Denomination (CFP francs)	Coinage in 1977 ¹	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
100 francs	Pieces	Grams 10.0	92% copper, 6% nickel, 2% aluminum.	<i>mm</i> . 30.0	<i>mm</i> . n.a.
50 francs		15.0	Pure nickel	33.0	2.2
20 francs		10.0	do	28.5	2.1
10 francs		6.0	do	24.0	1.8
5 francs		3.8	95% aluminum, 5% magnesium	31.0	2.5
2 francs	1,000,000	2.2	do	27.0	1.9
1 franc	1,000,000	1.3	do	23.0	1.7
50 centimes		.7	do	18.0	n.a.
Total	2,000,000				

¹1977 coinage was produced by the French Government Mint, Paris, and dated 1977.

Note.—French Polynesia is administratively divided into the following circumscriptions: The Windward Islands, Leeward Islands, Tuamotu group. Austral Islands, and the Marquezas Islands.

^{*} Reeded edges: 100, 50, 20, and 10 francs. Smooth edges: 5, 2, and 1 franc pieces.

n.a. Not available.

THE GAMBIA

	Denomination	Coinage in 1977 ¹	Gross weight	· · · · · · · · · · · · · · · · · · ·		Thickness and edge*
		Pieces	Grams		mm.	mm.
500	dalasi ²	1,044	33.44	900 gold, 100 silver	34.00	2.49
40	dalasi ²	8,500	35.00	925 silver, 75 copper	42.00	2.87
20	dalasi ²	9,320		do	38.61	2.75
10	dalasi	243	28.28	925 silver	38.60	n.a.
	Do		28.28	500 silver	38.60	n.a.
1	dalasi		18.14	75% copper, 25% nickel	34.29	n.a.
50	bututs	400,000		do	28.50	n.a.
25	bututs	400,000	5.66	do	23.60	n.a.
10	bututs		6.20	79% copper, 20% zinc, 1% nickel.	25.91	1.63
5	bututs		3.56	97% copper, 2.5% zinc, 0.5% tin.	20.32	1.52
1	butut	5,000,000	1.78	do	17.15	1.14
	Total	5,819,107				

¹ 1977 coinage, made by mints in the United Kingdom. The 10 dalasi were dated 1975, the 1 butut coins bore 1974, and the 50 and 25 bututs were dated 1971. All others were dated 1977.

GERMANY, FEDERAL REPUBLIC OF

Denomination	Coinage in 1977 ¹	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Pieces	Grams		mm.	mm.
10 Deutsche Mark		15.5	625 silver, 375 copper	32.50	2.25
5 Deutsche Mark ²	11,560,496		do	29.00	2.07
Do	36,396,193	10.0	75% copper, 25% nickel	29.00	2.07
			with a pure nickel core.		
2 Deutsche Mark	48,734,197	7.0	do	26.75	1.79
1 Deutsche Mark	86,370,851	5.5	75% copper, 25% nickel	23.50	1.75
50 pfennig	68,158,080		do	20.00	1.58
10 pfennig	292,809,479	4.0	90% steel brass clad	21.50	1.70
5 pfennig	189,166,248	3.0	do	18.50	1.70
2 pfennig	294,790,774		90% steel copper clad	19.25	1.52
1 pfennig	498,172,945		do	16.50	1.38
Total	1,526,159,263				

¹ 1977 comage was made by German Federal Government mints. Dates on coins vary, indicating the years in which the minting order was given.

² Believed to be part of the World Wildlife Conservation Series. The 500 dalasi, 4,500 40 dalasi, and 4,000 20 dalasi were proof coins.

^{*} Reeded edges: 500, 40, 20, 10, and 1 dalasi, 50 and 25 butut coins. Smooth edges: 10, 5 and 1 butut coins. n.a. Not available.

² Commemorative coins.

^{*} Lettered edges: 10, 5, and 2 DM. Plain edge with arabesque: 1 DM. Smooth edges: 50, 10, 5, 2, and 1 Pf.



Coinage of the Gambia

GHANA

Denomination	Coinage in 1977	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
New decimal series:	Pieces	Grams		mm.	mm.
20 pesewas			75% copper, 25% nickeldo	28.50 23.60	2.00 1.70
5 pesewas			do	19.41 19.51	1.30 1.40
scallops).		5.67	97% copper, 2.5% zinc, 0.5% tin.	25.48	1.50
¹/₂ pesewa		2.83	do	20.19	1.20
Total					

^{*} Reeded edges: 20, 10, 5, and 21/2 pesewas. Smooth edges: 1 and 1/2 pesewa

Note.—Itemized below are three sizes of proof commemoratives (unspecified denominations) dated 1957-77, which were struck by mints in the United Kingdom in 1977:

Pieces	Gram weight	Metallic Composition	Diameter(mm.)
300	. 39.54	916.6 gold	36.02
4,397	. 19.67	do	28.40
1,000	. 28.28	925 silver	38.60

These pieces had reeded edges.

GIBRALTAR

Denomination	Coinage in 1977 1	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
100 pounds	Pieces 95 95 95 13,500 65,000	15.52 7.77 28.28	916 gold	<i>mm</i> . 34.00 27.00 22.00 38.61 38.61	n.a.
Total	78,785				

¹⁹⁷⁷ coinage, produced by mints in the United Kingdom, was dated 1975, except the 25 pence which were dated 1952-

Note.—U.K. coins also circulate in Gibraltar.

² Commemorate the Silver Jubilee of Queen Elizabeth II. The silver coins were proof.

^{*} Milled edges.

n.a. Not available.

GREECE

Denomination	Coinage in 1977 ¹	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Pieces	Grams		mm.	mm.
20 drachmas	15,229,500	11.00	75% copper, 25% nickel	29.00	2.30
10 drachmas	21,409,500	7.50	do	26.00	1.95
5 drachmas		9.00	do	25.00	2.45
Do	25,420,000	5.50	do	22.50	1.85
2 drachmas	23,663,000	6.00	79% copper, 20% zinc, 1% nickel.	24.00	1.95
1 drachma	28,669,000	4.00	do	21.00	1.70
50 lepta	16,408,000		do	18.00	1.45
20 lepta	1,474,000	1.30	95% aluminum, 5% magnesium	22.00	1.65
10 lepta	1,960,000		do	20.00	1.65
Total	134,233,000				

¹ Greek Government Mint produced 1977 coinage, which bore the year 1976.

Previous issues of Greek coins in circulation in 1977

Denomination	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Grams		mm.	mm.
20 drachmas	12.00	75% copper, 25% nickel	32.00	2.15
10 drachmas	10.00	do	30.00	2.00
5 drachmas	9.00	do	28.00	2.00
2 drachmas	6.00	do	24.00	1.85
1 drachma	4.00	do	21.00	1.50
50 lepta	2.30	do	18.00	1.20
5 lepta	.85	do	20.00	1.10

^{*} Smooth edges: 20 and 10 drachma, 5 lepta. Reeded edges: All other denominations.

GREENLAND-Coins of Denmark circulate in Greenland

GRENADA-See Caribbean Territories, Eastern Group

GUATEMALA

Denomination	Coinage in 1977 ¹	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Pieces	Grams		mm.	mm.
50 centavos		11.00	720 silver, 280 copper	31.00	2.05
25 centavos	2,000,000		61% copper, 20% zinc,	27.00	1.60
			19% nickel.		
10 centavos	5,000,000	3.20	do	21.00	1.08
5 centavos	20,000,000	1.60	do	16.00	.92
2 centavos		6.00	70% copper, 30% zinc	27.00	1.60
l centavo	30,000,000	2.50	do	19.00	1.06
Do		3.00	ძა	21.00	1.50
1/2 centavo			do	16.00	1.02
Total	57,000,000				

^{1 1977} coinage, made at the Guatemalan Mint, bears the date 1977.

^{*}Smooth edges: 10 and 5 drachmas, 20 and 10 lepta coins. Reeded edges: All other denominations except the 20 drachmas, which had lettered edge.

^{*} Reeded edges: 50, 10, and 5 centavos. Lettered edge: 25 centavos. Smooth edges: 2, 1, and 1/2 centavos.



GUERNSEY

Denomination	Coinage in 1977 ¹	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Pieces	Grams		mm.	mm.
50 pence		13.50	75% copper, 25% nickel	30.00	2.03
25 pence ²	25,000	28.28	925 silver	38.61	n.a.
Do ²	207,700	28.28	75% copper, 25% nickel	38.61	n.a.
10 pence	250,000	11.31	do	28.50	2.03
5 pence	250,000	5.66	do	23.60	1.73
2 pence	600,000	7.13	97% copper, 2.5% zinc, 0.5%	25.91	1.80
·			tin.		
1 penny	640,000	3.56	do	20.32	1.52
1/2 penny		1.78	do	17.15	1.12
Total	1,972,700				

¹⁹⁷⁷ coinage, made by mints in the United Kingdom, bears the year 1977, except the 25 pence which were dated 1952-

NOTE.—United Kingdom coins also circulate in Guernsey.

GUINEA-BISSAU, REPUBLIC OF

Denomination	Coinage in 1977 ¹	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Pieces	Grams		mm.	mm.
20 pesos	244,000	13.00	75% copper, 25% nickel	32.00	n.a.
5 pesos	580,000	8.00	do	27.50	n.a.
2½ pesos	500,000	6.00	79% copper, 20% zinc, 1% nickel.	25.00	n.a.
1 peso	500,000	4.00	do	22.00	n.a.
50 centavos	500,000	2.25	Aluminum	25.00	n.a.
Total	2,324,000				

¹ 1977 coinage, produced by mints in the United Kingdom, was dated 1977.

NOTE.—The Republic of Guinea-Bissau became independent on Sept. 10, 1974.

² Commemorate the Silver Jubilee of Queen Elizabeth II. The silver coins were proof.

^{*} Smooth edge: 50, 2, 1, and ½ pence coins. Milled edges: 25, 10, and 5 pence. n.a. Not available.

^{*}Smooth edges: 1 peso and aluminum 50 centavos. Reeded edges: 20, 5, and 2½ pesos. n.a. Not available.

GUINEA

Denomination	Coinage in 1977	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
100 f-2	Pieces	Grams	7501	mm.	mm.
100 francs 50 francs			75% copper, 25% nickel	34.00	n.a. 2.13
25 francs		9.00	do	27.00	2.03
10 francs			do	23.50	1.75
1 franc			do	17.00	.89
Total					

^{*} Incused lettered edge: 50 francs. Milled edge: 100 francs. Other edges unknown. n.a. Not available.

GUYANA

Denomination	Coinage in 1977 ¹	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Pieces	Grams		mm.	mm.
100 dollars	130	5.74	500 gold	25.25	n.a.
50 dollars		48.30	925 silver, 75 copper	48.00	n.a.
10 dollars 2	200	43.40	do	45.01	n.a.
Do	100	37.53	75% copper, 25% nickel	45.01	n.a.
5 dollars 3	200	37.76	500 silver, 500 alloy	42.00	n.a.
Do	100		75% copper, 25% nickel	42.00	n.a.
1 dollar	700	19.08	do	35.56	2.16
50 cents	2,200		do	26.00	1.85
25 cents	4,005,200	4.25	do	22.00	1.52
10 cents	4,010,200	2.75	do	18.06	1.47
5 cents		2.50	79% copper, 20% zinc, 1% nickel.	19.51	1.22
Do	15,200	2.50	79% copper, 20% zinc, 1% tin	19.51	1.22
1 cent	15,200	1.50	do	16.00	1.17
Do		1.50	79% copper, 20% zinc, 1% nickel.	16.00	1.17
Total	8,049,430				

¹1977 coinage: 4 million 25 cent coins, 4 million 10 cent pieces, manufactured by mints in the United Kingdom, dated 1977; remainder made by the Franklin Mint, dated 1977.

² Bears the portrait of Cuffy, a national hero and leader of a slave revolt in 1763.

³ Honors H.N. Critchlow, organizer of Guyana's first labor union in 1922.

^{*} Reeded edges: \$100, \$50, \$5, \$1, 50, 25, and 10 cent coins. Smooth edges, 5 and 1-cent coins. n.a. Not available.

HAITI

Denomination	Coinage in 1977 ¹	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Pieces	Grams		mm.	mm.
Numismatic coins:					
1,000 gourdes			900 gold	32.00	1.35
500 gourdes ²	100		do	23.00	n.a.
200 gourdes			do	18.00	.86
100 gourdes			do	15.00	.71
50 gourdes			925 silver	38.00	1.93
25 gourdes		8.38	do	30.00	1.52
Subtotal	100				
Decules issue					
Regular issue: 50 centimes		9.88	70% copper, 18% zinc, 12% nickel.	29.00	1.90
20 centimes		7.50	do	26.20	1.90
Do		7.55	75% copper, 25% nickel	26.00	1.80
10 centimes		4.00	do	22.00	1.30
Do		4.00	70% copper, 18% zinc, 12% nickel.	22.70	1.40
5 centimes		2.65	75% copper, 25% nickel	20.00	1.10
Do			70% copper, 18% zinc, 12% nickel.	19.90	1.30
Subtotal					
Total	100				

¹ Numismatic proof coins, produced by Valcambi, S.A., Switzerland, were dated 1977.

² Portrays former and current Presidents François and Jean Claude Duvalier and commemorates the 20th anniversary of their rule.

^{*} Smooth edges: All denominations, for regular issue. Reeded edges: All numismatic coins. n.a. Not available.

NOTE.—U.S. coins also circulate in Haiti.

HONDURAS

Denomination	Coinage in 1977	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
1 lempira	Pieces	5.67 2.27 7.00 3.20 3.00	900 silver, 100 copper	<i>mm</i> . 31.00 24.00 18.00 26.00 21.00 20.00 15.00	mm. 2.5 2.0 1.5 2.0 1.5 1.5 1.0
Total					

^{*}Reeded edges: 1 lempira, 50 and 20 centavos. Smooth edges: 10, 5, 2, and 1 centavos.

HONG KONG

Denomination	Coinage in 1977 ¹	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Pieces	Grams		mm.	mm.
1,000 dollars 2	33,500	15.97	916 gold	28.40	2.00
5 dollars 3			75% copper, 25% nickel	31.00	2.08
2 dollars 4			do	28.00	2.03
1 dollar		11.66	do	30.00	1.85
50 cents		5.83	do	23.60	1.60
Do	59,401,000	4.92	79% copper, 20% zinc, 1% nickel.	22.50	1.72
20 cents 4		2.59	do	19.00	1.52
10 cents		4.54	do	20.57	1.98
5 cents	2,500,000	2.59	do	16.50	1.80
Total	61,934,500				

¹ The 1977 coinage, made by mints in the United Kingdom, was dated 1977. ² Coins commemorate the Year of the Snake. Includes 8,000 proof coins.

³ 10-sided coin, diameter across corners.

⁴ 12 scallops.

^{*}Reeded edges: 1,000 and 1 dollar coins, 50, 10, and 5-cent pieces. Smooth edges: 5 and 2 dollar and 20 cent coins.





HUNGARY

Denomination	Coinage in 1977 ¹	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
200 forint ²	Pieces 120,000	Grams	640 cilvor	<i>mm</i> . 37.00	<i>mm</i> .
	120,000		640 silver		
100 forint			dodo	37.00	2.60
50 forint	4,618,000		Nickel	34.00 28.00	2.20 1.90
	50,000	5.73		24.30	1.63
5 forint	10,115,000		do "Brass 72"	22.00	1.03
1 forint	10,050,000			22.80	
50 fillér	10,050,000		97% aluminum, 3% magnesium.	21.50	1.80 1.60
20 fillér	30,050,000		do	20.40	
	30,075,000				1.40
10 fillér 5 fillér	60,000		do	18.50	1.20
				17.00	1.36
2 fillér	60,000	.03	do	18.00	1.11
Total	95,248,000				

¹ 1977 coinage, produced by Állami Pénzveró, Budapest, bore the year 1977.

ICELAND

Denomination	Coinage in 1977 ¹	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Pieces	Grams		mm.	mm.
10,000 kronur		15.50	900 gold	27.75	n.a.
1,000 kronur		30.00	925 silver	39.00	n.a.
500 kronur			do	35.00	n.a.
50 kronur	200,000	12.50	75% copper, 25% nickel	30.00	2.00
10 kronur	2,000,000	6.50	do	25.00	1.80
5 kronur	1,000,000		do	20.75	1.70
2 kronur		9.50	92% copper, 6% aluminum, 2% nickel.	28.00	2.08
1 krona	• • • • • • • • • • • • • • • • • • • •	4.75	79% copper, 20% zinc, 1% nickel.	22.50	1.50
Do	10,000,000	.61	Aluminum	17.00	n.a.
Total	13,200,000				

¹⁹⁷⁷ coins, struck at mints in the United Kingdom, were dated 1977.

²Consists of four commemorative issues of 30,000 each of which 5,000 of each are proof. The first recognizes the 175th anniversary of the founding of the Hungarian National Museum. The other three honor great Hungarian painters: Ádam Mányoki (1673–1756), Tivadar Csontváry Kosztka (1853–1919), and Joseph Rippl-Rónai.

^{*}Smooth edges: 10 and 2 forini and 50, 10, 5, and 2 fillér pieces. Reeded edges: 1 and 5 forint and, 20 fillér coins. Pattern edges: 200, 100, and 50 forint coins.

^{*}Milled edges: 10,000, 1,000, 500, and 2 kronur, 1 krona. Smooth edges: 50, 10, and 5 kronur. n.a. Not available.



Coinage of Hungary



Coinage of India

INDIA

Denomination	Coinage in 1977 ¹	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Pieces	Grams		mm.	mm.
50 rupees		35.00	500 silver, 400 copper,	44.00	n.a.
			50 nickel, 50 zinc.		
20 rupees		30.00	do	44.00	n.a.
10 rupees		22.50	do	39.00	2.50
Do		25.00	75% copper, 25% nickel	39.00	n.a.
1 rupee	177,105,000	8.00	do	28.00	2.00
50 paise	97,272,000	5.00	do	24.00	1.55
25 paise	270,520,000	2.50	do	19.00	1.20
10 paise (12 scallops) ²	50,347,500	2.30	Aluminum with 3.5% to 4%	26.00	2.25
			magnesium.		
5 paise (Square) ³	357,900,000	1.50	do	(4)	2.35
2 paise (8 scallops)	251,955,000	1.00	do	20.00	1.75
1 paisa (Square)		.75	do	(5)	1.85
Total	1,205,099,500				

¹ 1977 coinage was produced by the India Government Mint. The coins for regular issue bear the year 1977.

n.a. Not available.

Previous issues of Indian coins in circulation in 1977

Denomination	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
50 paise	2.50 4.50 4.25 5.00	Pure nickeldo	<i>mm.</i> 24.00 19.00 22.00 23.00 23.00 (¹)	mm. 1.55 1.30 1.85 1.75 1.85 1.95

¹ Across corners 21 mm. Across flats 19.55 mm.

² Includes 25,060,000 "Development oriented design" coins. ³ Includes 100,000,000 "Development oriented design" coins.

⁴ Across corners 22 mm. Across flats 19 mm.

⁵ Across flats 14.70 mm. Between opposite corners 17 mm. *Serrated edges: 20 and 10 rupees, 50, and 25 paise coins. Smooth edges: Other denominations.

^{*}Serrated edges: 50, 25, and 20 paise coins. Smooth edge: 10 and 3 paise.



Coinage of India

INDONESIA

Denomination	Coinage in 1977	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Pieces	Grams		mm.	mm.
Commemorative coins: 1					
100,000 rupiah			900 gold	34.00	2.49
25,000 rupiah			do	55.00	2.00
20,000 rupiah			do	50.00	2.00
10,000 rupiah			do	40.00	1.60
5,000 rupiah		12.34		30.00	1.50
Do	100		925 silver	42.00	2.87
Do	100		500 silver, 500 copper	42.00	2.87
2,000 rupiah		4.90	900 gold	18.00	1.60
Do	100		925 silver	38.61	2.75
Do	100		500 silver, 500 copper	38.61	2.75
1,000 rupiah			1000 silver	55.00	2.10
750 rupiah			do	45.00	2.30
500 rupiah			do	40.00	2.00
250 rupiah			do	30.00	1.80
200 rupiah		8.00	do	26.00	1.90
Subtotal	400				
Regular issue: 2					
100 rupiah	31,746,000	9.72	75% copper, 25% nickel	28.50	1.70
50 rupiah	36,500,000		do	24.00	1.50
25 rupiah	36,500,000		do	20.00	1.25
10 rupiah			do	16.00	1.00
Do		4.00	90% steel brass clad	22.00	1.68
5 rupiah³	16,300,000	3.10	Aluminum	28.50	1.78
2 rupiah			do	26.00	2.00
1 rupiah		1.42	do	22.00	1.75
Subtotal	121,046,000				
Total	121,046,400				

¹ Conservation coins, part of an international series, drawing attention to endangered species of wildlife, were produced by mints in the United Kingdom and dated 1974; the 925 fine coins were proof.

² Coins for regular issue were minted by Perum Peruri. The 100 rupiah pieces were dated 1973, the 50 and 25 rupiah coins bore 1971, and the 5 rupiah coins were dated 1974.

³ FAO coins bearing a symbol of the Family planning program dated 1974. *Smooth edges: Steel brass clad 10 rupiahs, 5 rupiahs, and the commemorative pieces, except the Conservation coins. Milled edges: 50, 25, and cupronickel 10 rupiahs, and all Conservation coins. Lettered edge: 100 rupiahs.

IRAN (Year ended March 20, 1978)

Denomination	Coinage 1	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Pieces	Grams		mm.	mm.
Commemorative: 2					
10 pahlavi	5,251		900 gold, 100 silver and copper	50.00	n.a
5 pahlavi	18,350		do	40.00	n.a
2½ pahlavi	24,630		do [30.00	n.a
1 pahlavi	200,550	8.14	do	22.00	n.a
½ pahlavi	325,000	4.07	do	19.00	n.a
¼ pahlavi	281,900	2.03	do	16.00	n.a
Subtotal	855,681				
Regular issues:	-				
20 rials	23,369,583	9.00	75% copper, 25% nickel	31.00	n.a
10 rials	24,324,000		do	28.00	n.a
5 rials	47,905,800		do	25.00	n.a
2 rials	54,725,000		do	22.00	n.a
1 rial.	71,150,000		do	18.00	n.a
50 dinars	71,150,000		91.5% copper, 8.5% aluminum	20.00	n.a
Do	3,270,350		Clad steel	20.00	n.a
Subtotal	224,744,733				
Total	225,600,414				

¹ Coinage, bearing the date 2536 in Arabic, was made by the Mint of the Central Bank of Iran. See note.

Note.—In 1976 Iran adopted the Monarchic calendar based on the origin of the Persian monarchy under Cyrus the Great, replacing the Solar Hegira calendar. The first coins of Iran dated under this revision were for the year 2535, which began on Mar. 21, 1976.

IRAQ

	Denomination	Coinage in 1977 1	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
5 (dinars	Pieces		916.6 gold	<i>mm</i> . 28.40	<i>mm</i> . n.a.
1 (dinar			500 silver, 400 copper, 50 nickel, 50 zinc.	40.00	3.10
250 f	fils		15.00	Pure nickel	33.00	n.a.
100 f	fils		10.00	500 silver, 400 copper, 50 nickel, 50 zinc.	29.00	n.a.
]	Do		11.00	75% copper, 25% nickel	29.00	n.a.
50 f	fils		5.50	do	23.00	1.73
25 f	īls		2.27	do	20.00	1.24
10 f	īls		6.75	do	26.00	n.a.
I	Do	1,000,000	5.75	Stainless iron, 13% chromium.	26.00	n.a.
5 f	īls ²		5.00	75% copper, 25% nickel	22.00	n.a.
I	Do	19,200,000	4.00	Stainless iron, 13% chromium.	22.00	n.a.
1 f	īls³		2.50	95.5% copper, 3% tin, 1.5% zinc.	19.00	n.a.
	Total	20,200,000				

¹ 1977 coinage was produced by mints in the United Kingdom. The coins bore the dates 1395–1975.

² Struck by the Central Bank of Iran for Bank Melli Iran for sale to the public.

^{*}Serrated edges: All denominations.

n.a. Not available.

² Coins have 12 scallops.

³ Coin is 10-sided. Diameter, inside measurement.

^{*}Incuse lettered: 100 fils. Milled edges: 5 and 1 dinars, 50, 25, and 10 fils. Smooth edges: 1 fils and cupronickel 10 and 5 fils coins

n.a. Not available.

IRELAND, REPUBLIC OF

Denomination	Coinage in 1977 ¹	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
Decimal coins:	Pieces	Grams		mm.	mm.
50 pence (7 sided)	2,400,000	13.50	75% copper, 25% nickel	30.00	2.50
10 pence	2,496,000		do	28.50	2.23
5 pence	3,270,000		do	23.60	1.73
2 pence	2,552,000	7.13	97% copper, 2.5% zinc, 0.5% tin.	25.91	1.78
1 penny	21,840,000	3.56	do	20.32	1.50
¹/2 penny	136,000	1.78	do	17.15	1.09
Total	32,694,000				

¹1977 coinage was produced by New Mint, Sandyford, Co., Ireland, and the British Royal Mint. Coinage bore the year 1976, except for 2.4 million of the 50 pence which were dated 1977.

ISLE OF MAN

Denomination	Coinage in 1977	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
Crown		28.28 13.50 11.37 5.66 7.13	925 silver, 75 copper	mm. 38.61 38.61 30.00 28.50 23.60 25.91 20.32 17.15	mm. n.a. n.a. n.a. n.a. n.a. n.a. n.a.
Total					

¹ Seven-sided coin.

NOTE.—British coins are in general circulation on the Isle of Man.

^{*}Milled edges: 5 and 10 pence coins. Smooth edges: 50, 2, 1, and ½ pence coins.

^{*}Milled edges: 1 crown, 10. and 5 pence coins. Smooth edges: 50, 2, 1, and half pence pieces. n.a. Not available.

ISRAEL

Denomination	Coinage in 1977	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Pieces	Grams		mm.	mm.
Commemorative coms:					
500 pounds		28.00	900 gold, 100 copper	35.00	2.15
Do		20.00	900 gold, 100 copper	30.00	n.a.
200 pounds		27.00	do	33.00	n.a.
100 pounds			do	27.00	n.a.
50 pounds			do	22.00	n.a.
25 pounds		26.00	935 silver. 65 copper	37.00	3.25
Do 1	52,100		900 silver, 100 copper	37.00	3.25
Do			800 silver, 200 copper	40.00	3.25
Do 1	64,500		500 silver, 500 copper	34.00	3.25
20 pounds			900 gold, 100 copper	22.00	1.60
10 pounds:			935 silver, 65 copper	36.70	3.00
Do			900 silver, 100 copper	36.70	3.25
Do			500 silver, 500 copper	34.00	3.25
Do			Gold 900/1,000	30.00	3.25
Do ²	75,991		75% copper, 25% nickel	34.00	3.25
5 pounds	, , , , , , , , , , , , , , , , , , , ,		750 silver, 250 copper	34.00	n.a.
1 pound			75% copper, 25% nickel	32.20	2.40
½ pound			do	29.50	2.40
Subtotal	192,591				
Trade coins:3					
1 pound	12,057,000	9.00	75% copper, 25% nickel	27.50	2.20
½ pound	11,649,000		do	24.50	2.00
25 agorot	60,000		do	25.50	1.90
Do	4,118,000		92% copper, 6% aluminum, 2% nickel.	25.50	1.90
10 agorot	22,920,000	4.20	do	21.50	1.80
Do	30,180,010		97% aluminum, 3% magnesium	21.50	1.60
	60,000		75% copper, 25% nickel	21.50	1.60
Do	60,000		do	17.50	1.00
5 agorot					
Do		2.32	92% copper, 6% aluminum, 2% nickel.	17.50	1.50
Do	34,940,010	.75	97% aluminum, 3% magnesium	17.50	1.50
1 agora	8,780,000		do	20.00	1.35
Subtotal	124,824,020				
Grand total	125,016,611				

¹ Consisted of the following commemorative coins made by the Israel Government Mint, Jerusalem: The 500 fine coins were struck in honor of the 29th anniversary of Israeli independence (27,200 proof coins marked "Mem" and 37,300 uncirculated coins marked with the Star of David) while the 900 fine pieces were Pidyon HaBen coins (20,000 proof coins marked "Mem" and 32,100 uncirculated coins marked with the Star of David).

² Jerusalem Hanukka coins produced by the Israel Mint consisted of 29.689 proof coins marked "Mem" and 46,302 uncirculated coins marked with the Star of David.

³ Trade coins were produced by the Israel Mint with the exception of 30,000,010 aluminum 10 agorot and 15,000,010 aluminum 5 agorot coins, which were made by the Royal Canadian Mint. The Israel Mint also struck 60,000 mintmarked coins of each denomination, including special cupronickel issues of the 25, 10, and 5 agorot for inclusion in 1977 trade coin sets.

^{*}Smooth edges: Nonproof commemorative 50, 25, and 10 pounds, proof 500 fine 25 pounds, 25, 10, and 5 agorot coins. Milled edges: 500, 200, 100, 50, 10, and 5 pound proofs, 25 pound Pidyon HaBen proof, and ½ pound trade coin. Alternating milled and plain edges: 1 pound trade coins. The 1 agora has 12 scallops.

n.a. Not available.



Coinage of Israel

ITALY

Denomination	Coinage in 1977 i	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Pieces	Grams		mm.	mm.
1,000 lire		14 60	"Lega argento" (835 silver, 165 copper).	31.4	2.10
500 lire	689,752	11.00	do	29.0	2.10
200 lire	15,900,000	5.00	"Bronzital" (92% copper, 6% aluminum, 2% nickel).	24.0	1.65
100 lire	253,980,000	8.00	"Acmonital" (Steel containing 18% chrome).	27.8	2.00
50 lire	293,800,000	6.25	do	24.8	2.00
20 lire	9,900,000	3.60	"Bronzital" (92% copper, 6% aluminum, 2% nickel).	21.3	1.50
10 lire	81,900,000	1.60	"Italma" (96.2% aluminum, 3.5% magnesium, 0.3% manganese).	23.3	1.65
5 lire	6,600,000	1.00	do	20.2	1.40
2 lire		.800	do	18.3	1.45
l lira			do	17.2	1.20
Total	662,769,752				

¹ 1977 coinage, made by the Italian Government Mini, was dated 1977.

*Lettered edges: 1,000 and 500 lire. Serrated edges: 200, 100, 50, and 2 lire. Smooth edges: 20, 10, 5, and 1 lira coins.

IVORY COAST, REPUBLIC OF-See West African Monetary Union

JAMAICA

Denomination	Coinage in 1977 ¹	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
Decimal:	Pieces	Grams		mm.	mm.
20 dollars		15.75	500 gold	27.10	n.a.
1 dollar		28.28	75% copper, 25% nickel	38.61	n.a.
50 cents		12.48	do	30.00	n.a.
25 cents		14.14	do	32.31	1.93
20 cents		11.31	do	28.50	2.03
10 cents		5.65	do	23.60	1.45
5 cents	2,400,000	2.82	do	19.40	1.09
1 cent		4.15	97% copper, 2.5% zinc, 0.5% tin.	21.08	1.35
Do		1.22	Aluminum	21.08	n.a.
Total	2,400,000				

¹ Coins, made by mints in the United Kingdom, were dated 1977.

JAPAN

Denomination	Coinage in 1977 ¹	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Pieces	Grams		mm.	mm.
100 yen	440,000,000	4.80	75% copper, 25% nickel	22.60	1.70
Do		12.00	do	30.00	2.40
50 yen	176,000,000	4.00	do	² 21.00	1.75
10 yen	1,467,000,000	4.50	95% copper, 4%-3% zinc, 1%-2% tin.	23.50	1.50
5 yen	340,000,000	3.75	60%-70% copper, 40%-30% zinc.	³ 22.00	1.50
1 yen	895,000,000	1.00	Pure aluminum	20.00	1.50
Total	3,318,000,000				

¹ The 1977 coinage, made by the Japanese Government Mint, bears the date 52 d year of the Showa.

Previous issues of Japanese coins outstanding in 1977

Denomination	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Grams		mm.	mm.
1,000 yen (Commemorative)	20.00	925 silver, 75 copper	35.00	2.50
100 yen	4.80	600 silver, 300 copper, 100 zinc	22.60	1.70
Do		75% copper, 25% nickel	28.00	2.00
Do	12.00	do	30.00	2.38
50 yen	5.50	Pure nickel	25.00	1.60
Do		do	1 25.00	1.60
10 yen	4.50	95% copper, 4%-3% zinc, 1%-2% tin.	23.50	1.50
5 yen	4.00	60%-70% copper, 40%-30% zinc	² 22.00	1.64

With central hole 6 mm. in diameter.

^{*}Reeded edges: \$1, 25, 20, 10, and 5 cents. Smooth edges: 50 and 1 cent coins. n.a. Not available.

² With central hole 4 mm. in diameter.

³ With central hole 5 mm. in diameter.

^{*}Milled edges: 100 and 50 yen. Smooth edges: 10, 5, and 1 yen coins.

² With central hole 5 mm. in diameter.

^{*}Milled edges: 1,000 and 100 yen; 50 yen of 5.5 gram weight; 10 yen and 5 yen. Smooth edges: 50 yen of 5 gram weight.



Coinage of Japan

JERSEY

Denomination	Coinage in 1977 ¹	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Pieces	Grams		mm.	mm.
50 pence		13.50	75% copper, 25% nickel	30.00	2.29
25 pence	25,000	28.28	925 silver	38.61	n.a.
Do	261,600	28.28	75% copper, 25% nickel	38.61	n.a.
10 pence		11.31	do	28.50	2.31
5 pence		5.66	do	23.60	1.72
2 pence		7.12	97% copper, 2.5% zinc, 0.5% tin.	25.91	1.55
1 penny		3.56	do	20.32	1.27
½ penny		1.75	do	17.15	.89
Total	286,600				

¹1977 coinage, manufactured by mints in the United Kingdom, commemorated the Silver Jubilee of Queen Elizabeth II and was dated 1952–1977.

NOTE.—United Kingdom coins also circulate in Jersey.

JORDAN

Denomination	Coinage in 1977 ¹	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Pieces	Grams		mm.	mm.
Regular issue:					
250 fils			75% copper, 25% nickel	34.00	2.40
100 fils	2,500,000		do	30.00	2.20
50 fils	6,000,000		do	26.00	1.90
25 fils	1,600,000		do	22.00	1.70
20 fils			do	20.00	1.60
10 fils		10.00	97% copper, 2.5% zinc, 0.5% tin.	28.00	2.20
Do		10.00	95.5% copper, 3% tin, 1.5% zinc.	28.00	2.20
5 fils		6.00	do	24.00	1.80
Do			97% copper, 2.5% zinc,	24.00	1.80
			0.5% tin.		
1 fil			do	18.00	1.60
Do		3.00	95.5% copper, 3% tin, 1.5% zinc.	18.00	1.60
Subtotal	10,100,000				
NIi			-		
Numismatic:	1.005	22.44	100014 100 -11	24.00	2.40
50 dinars ²	1,095		900 gold, 100 silver	34.00	2.49
25 dinars ³	575		916 gold	29.01	1.70
3 dinars ²	6,337		925 silver, 75 copper	42.00	2.87
2½ dinars²	6,257		do	38.61	2.75
250 fils	33		916.6 gold, 83.4 copper	34.00	n.a.
100 fils			do	30.00	n.a.
50 fils	33		do	26.00	n.a.
25 fils	33	9.21		22.00	n.a.
10 fils	33		do	28.00	n.a.
5 fils	33		do	24.00	n.a.
1 fil	33	5.83	do	18.00	n.a.
Subtotal	14,495				
Total	10,114,495				

¹1977 coinage was produced by mints in the United Kingdom, with the exception of the 25 dinar coins, which were made by Huguenin Medailleurs, a private firm in Switzerland. The 250 fils through 1 fil gold proof coins were dated 1975; all other coins bore 1977.

^{*}Smooth edges: 50, 2, 1, and ½ pence pieces. Milled edges: 25, 10 and 5 pence coins.

² Part of the World Wildlife Conservation series. Includes 270 proof 50 dinars, 3,087 proof 3 dinars, and 3,029 proof 2½ dinars.

³ Reported by usually reliable unoffical source to be proof coins commemorating the 25th anniversary of the reign of King Hussein.

n.a. Not available.

^{*}Milled edges: 50, 25, 3, and 21/2 dinars, 250, 100, 50, 25, and 20 fils. Smooth edges: 10, 5, and 1 fils.

KENYA

Denomination	Coinage in 1977 ¹	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Pieces	Grams		mm.	mm.
5 shillings		13.90	92% copper, 6% aluminum, 2% nickel.	33.00	n.a
2 shillings		14.14	75% copper, 25% nickel	32.30	2.2€
1 shilling		7.78	do	27.74	1.45
50 cents	7,680,000	3.89	do	20.96	1.32
25 cents		2.59	do	18.06	1.35
10 cents	9,600,000	9.45	79% copper, 20% zinc, 1% nickel.	30.86	1.47
5 cents		5.67	do	25.48	1.30
Total	17,280,000				

^{*}Milled edges: 2 shillings, 1 shilling, 50 and 25 cents. Smooth edges: 5 shillings and 10 and 5 cents. n.a. Not available.



Coinage of Korea

KOREA

De	enomination	Coinage in 1977 1	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
		Pieces	Grams		mm.	mm.
100 w	on	30,000,000	5.42	75% copper, 25% nickel	24.00	n.a.
D	0			dodo	30.00	n.a.
50 w	on	1,000,000	4.16	70% copper, 18% zinc, 12% nickel.	21.60	n.a.
10 w	on	1,000,000	4.06	65% copper, 35% zinc	22.86	n.a
5 w	on	1,000,000		do	20.40	n.a.
1 w	on	30,000,000	.73	Pure aluminum	17.20	1.39
	Total	63,000,000				

¹⁹⁷⁷ coinage, made by Kyeongsan Mint, was dated 1977.

KUWAIT

Denomination	Coinage in 1977 ¹	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Pieces	Grams		mm.	mm.
2 dinars		28.28	925 silver, 75 nickel	38.60	n.a.
Do		28.28	500 silver, 400 copper, 50	38.60	n.a.
			nickel, 50 zinc.		
100 fils	1,600,000	6.50	75% copper, 25% nickel	26.0	1.68
50 fils	6,000,000	4.50	do	23.0	1.47
20 fils	3,200,000	3.00	do	20.0	1.32
10 fils	2,400,000	3.75	79% copper, 20% zinc,	21.0	1.52
			1% nickel.		
5 fils	2,000,000	2.50	do	19.5	1.22
1 fil	2,500,000	2.00	do	17.0	n.a.
Total	17,700,000				

¹ The 1977 coinage was made by mints in the United Kingdom. The dates on the coins were 1397–1977. *Milled edges: 2 dinars, 100, 50, and 20 fils. Smooth edges: 10, 5, and 1 fils.

^{*}Smooth edges: 10, 5, and 1 won coins. Reeded edges: 100 and 50 won.

n.a. Not available.

n.a. Not available.

NOTE.—The Kuwaiti Dinar is divided into 1,000 fils.

LAOS-No metallic coins have been in circulation in Laos since 1958

LEBANON

Denomination	Coinage in 1977	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Pieces	Grams		mm.	mm.
l livre (pound)			Pure nickel	28.00	n.a.
50 piastres		6.00	do	24.00	1.75
25 piastres		4.00	92% copper, 6% aluminum, 2% nickel.	23.50	n.a.
10 piastres		3.20	do	21.00	n.a.
5 piastres		2.20	do	18.00	n.a.
Total					

^{*}Milled edges: All denominations.

LESOTHO-Coins of the Republic of South Africa circulate in Lesotho

LIBERIA

Denomination	Coinage in 1977 ¹	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Pieces	Grams		mm.	mm.
100 dollars	5,344	10.93	900 gold	26.16	n.a.
25 dollars		23.31	910 silver, 90 copper	30.20	2.30
5 dollars	3,683		900 silver, 100 copper	42.00	3.12
1 dollar	2,131	17.94	75% copper, 25% nickel	34.00	2.74
50 cents	2,131		do	29.00	1.91
25 cents	2,131	4.49	do	23.00	1.50
10 cents	2,131	1.79	do	16.99	1.17
5 cents	2,131	4.15	do	19.99	1.73
l cent	2,131	2.59	95% copper, 5% zinc	17.91	1.40
Total	21,813				

¹ All but the \$100 coins were manufactured by mints in the United Kingdom and dated 1976. Includes 2,131 7-coin proof sets. The 900 fine gold commemorative coins with reeded edges were believed to have been manufactured in honor of the founding President Joseph J. Roberts, on the 130th anniversary of Liberia, by the Franklin Mint, Pennsylvania.
*Reeded edges: 5 and 1 dollars, 50, 25, and 10 cent coins. Smooth edges: 5 and 1 cent coins.

NOTE.—Minor amounts of U.S. coins circulate in Liberia.

n.a. Not available.

n.a. Not available.

LIBYA

Denomination	Coinage tn 1977 i	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
100 dirhams	Pieces 1,432,500 4,640,000 3,500,000 6,750,000	6.30 5.50 3.00 2.50	75% copper, 25% nickeldo	mm. 27.00 25.00 24.00 20.00 18.50 16.00	

¹ Coins, produced by mints in the United Kingdom, were dated 1975.

Note.—The name of the pound was changed to the Libyan dinar, with units of dirhams, on Sept. 1, 1971.

Previous issues of Libyan coins in circulation in 1977

Denomination	Denomination Gross weight		Diam- eter	Thickness and edge*
	Grams		mm.	mm.
100 milliemes	11.00	75% copper, 25% nickel	30.00	2.0
50 milliemes	7.00	do	(1)	1.8
20 milliemes	6.00	do	24.00	1.8
10 milliemes	3.25	do	20.00	1.5
5 milliemes	2.50	79% copper, 20% zinc, 1% nickel.	(2)	1.2
1 millieme	1.75	do	16.00	1.0

¹Twelve scallops, measuring 26.0 mm. across scallops, and 24.3 mm. inside scallops.

NOTE.—The name of the pound was changed to the Libyan dinar, with units of dirhams, on Sept. 1, 1971.

LIECHTENSTEIN—Coins of Switzerland circulate in Liechtenstein

LUXEMBOURG

Denomination	Coinage in 1977 ¹	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
250 francs 100 francs 10 francs 5 francs 25 centimes Total	1,000,000	18.00 8.00 6.00 4.00	835 silver, 165 copperdo	mm. 37 33 27 24 21 19	mm. 2.30 2.05 2.00 1.75 1.51 1.00

¹ 1977 coinage made by Belgian Government Mint, Brussels, was dated 1977.

NOTE.—Belgian coins also circulate in Luxembourg.

[•] Reeded edges: 100, 10, and 1 dirhams. Smooth edges: 50, 20, and 5 dirhams.

n.a. Not available.

²Twelve scallops, measuring 20.0 mm. across scallops, and 18.7 mm. inside scallops.

^{*}Milled edges: 100, and 10 milliemes. Smooth edges: 50, 20, 5, and 1 millieme coins.

^{*}Milled edges: 250, 100, 5, and 1 franc coins. Smooth edges: 10 francs and 25 centimes.

MACAO

Denomination	Coinage in 1977	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Pieces	Grams		mm.	mm.
20 patacas		18.00	650 silver, 350 copper	35.00	2.28
5 patacas		10.00	do	30.00	2.50
1 pataca		3.00	do	19.00	1.10
Do		10.60	Pure nickel	28.50	2.10
50 avos		5.90	75% copper, 25% nickel	23.60	1.83
10 avos		4.00	95% copper, 3% zinc, 2% tin.	22.00	1.20
Do		4.00	79% copper, 20% zinc,	22.00	1.20
			1% nickel.		
5 avos		2.00	95% copper, 3% zinc, 2% tin.	17.00	1.10
Do		2.60	79% copper, 20% zinc,	17.00	1.50
			1% nickel.		
Total					

^{*}Serrated edges: 20, 5 patacas, 1 pataca (silver), and 50 avos. Smooth edges: 1 pataca (nickel), 10, and 5 avos.

MADEIRA ISLANDS—Coins of Portugal circulate in Madeira Islands

MADAGASCAR, DEMOCRATIC REPUBLIC OF

Denomination	Coinage in 1977	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Pieces	Grams		mm.	mm.
20 francs	600,000	6.00	92% copper, 6% aluminum, 2% nickel.	24 50	1.70
Do		4.00	91% copper, 9% aluminum	23.50	1.70
10 francs			do	20.00	1.70
Do	2,500,000		92% copper, 6% alununum, 2% nickel.	21.00	1.70
5 francs	4,000,000	5.00	Stainless steel	22.00	2.00
Do		3.50	95% aluminum, 5% magnesium	31.00	2.30
2 francs	3,000,000	3.40	Stainless steel	19.00	1.88
Do		2.20	95% aluminum, 5% magnesium	27.00	1.90
1 franc	2,250,000	2.40	Stainless steel	17.00	1.66
Do		1.30	95% aluminum, 5% magnesium	23.00	1.40
Total	12,350,000				

¹⁹⁷⁷ coins were manufactured by French Government Mini, Paris. Dates reflect the year in which the mining order was given.
*Smooth edges.

MALAWI

Denomination	Coinage in 1977 ¹	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
10 kwacha Do	Pieces	49.09 28.28	925 silver	<i>mm</i> . 38.60 38.60 38.70	mm. n.a. n.a. n.a.
20 tambala	5,000,000	5.66 2.83	dodododododo	28.50 23.60 19.40 20.30	2.31 1.45 1.40 n.a.
1 tambala	10,000,000	1.78	zinc. do	17.20	n.a.

¹ 1977 coinage, produced by mints in the United Kingdom, was dated 1977.

^{*}Smooth edges: 2 and 1 tambala. Reeded edges: 10 kwacha, 20, 10, and 5 tambala. Incuse-lettered edge: 1 kwacha n.a. Not available.

MALAYSIA

Denomination	Coinage in 1977	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Pieces	Grams		mm.	mm.
Commemorative:					
500 ringgit 1			900 gold	34.00	2.49
250 ringgit		10.28	do	26.16	1.55
200 ringgit 2	18,117	7.43	do	25.25	1.35
25 ringgit 2	106,081	35.00	925 silver	42.00	3.22
Do 1	200		do	42.00	2.87
15 ringgit 1 10 ringgit	1,000	28.28	do	38.61	2.75
(14 sided)		10.82	do	27.70	2.31
5 ringgit		29.03	75% copper, 25% nickel	38.00	3.20
1 ringgit 3	1,514,245		do	33.35	2.41
Do (14 sided)4	414,608		do	33.35	2.41
Subtotal	2,054,251				
Regular issue:5					
50 sen	12,658,598	9.33	75% copper, 25% nickel	27.76	2.16
20 sen	66,139,363	5.66	do	23.60	1.70
10 sen	51,600,493	2.83	do	19.41	1.35
5 sen	12,229,239	1.41	do	16.26	.97
1 sen		1.94	97% copper, 2.5% zinc, 0.5% tin.	17.78	1.12
Do	22,221,441	1.74	Copper clad steel	17.78	1.12
Subtotal	164,849,134				
Total	166,903,385				

¹ Part of the World Wildlife Conservation series, drawing attention to endangered species of wildlife, produced by mints in the United Kingdom, dated 1976.

²Coins commemorating the Ninth Southeast Asia Games, dated 1977, were produced by the Franklin Mint, a private mint in the United States, and included 5,578 proof \$200 and 6,077 proof \$25.

³ Consists of 1,011,095 1977-dated coins commemorating the Ninth Southeast Asia Games (1,000,016 made by Kilang Wang; 11,079 proof coins manufactured by the Franklin Mint) and 503,150 coins dated 1957–1977 in honor of the 20th anniversary of Malaysian independence (500,050 made by Kilang Wang; 3,100 proof coins manufactured by the Franklin Mint).

⁴Coins commemorating the Third Malaysian Plan for economic development bore 1976–1980 and were produced by Kilang Wang (Malaysian Mint).

⁵ Coins for regular issue were produced by Kilang Wang. 4,422 50 sen, 14,129,458 20 sen, 3,247,109 5 sen, and 2,711,434 1 sen were dated 1976; all others bore the year 1977.

^{*}Smooth edges: All 14-sided coins designated in denomination column and 1 sen coins. Reeded edges: \$500, \$250, \$25, \$15, 20, 10, and 5 sen coins. Lettered edges: \$1 commemorating Southeast Asia Games and 20th anniversary of independence and 50 sen coins.

NOTE.—The basic currency unit was changed from the dollar to ringgit, with fractional unit becoming the sen. The symbols for the monetary units remained the same.

MALDIVE REPUBLIC

Denomination	Coinage in 1977 ¹	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Pieces	Grams		mm.	mm.
20 rupees	15,000	28.28	500 silver, 500 copper	38.61	n.a.
5 rupees	15,000	19.00	75% copper, 25% nickel	35.66	n.a.
50 laris		5.66	79% copper, 20% zinc, 1% nickel.	23.60	n.a.
25 laris		4.15	do	20.19	n.a.
10 laris	,		do	(2)	n.a.
5 laris			do	(3)	n.a.
2 laris		3.24	97% copper, 2.5% zinc, 0.5% tin.	(4)	n.a.
1 lari,		1.50	do	15.01	n.a.
Total	30,000				

¹⁹⁷⁷ coinage, produced by mints in the United Kingdom, was dated 1977. Believed to be FAO food plan coins.

MALI

Denomination	Coinage in 1977	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Pieces	Grams		mm.	mm.
100 francs		8.00	92% copper, 6% aluminum, 2% nickel.	27.80	n.a.
50 francs		4.00	do	23.50	n.a.
25 francs	1	2.50	Aluminum with approximately 2.8% magnesium and 0.35% manganese.	27.00	1.60
Do		2.55	95% aluminum, 5% manganese	27.00	n.a.
10 francs		1.55	do	23.50	n.a.
Do		1.50	Aluminum with approximately 2.8% magnesium, and 0.35% manganese.	23.50	1.60
5 francs		1.00	do	20.00	1.70
Total					

n.a. Not available.

² Twelve scallops, measuring 23.1 mm. across scallops, 21.6 mm. inside scallops.

³ Eight scallops, measuring 20.3 mm. across scallops, 17.8 mm. inside scallops.

⁴ Square coin with rounded corners, 18.2 mm. across flats, 21.5 mm. across diagonals.

^{*}Security edges: 50 and 25 laris. Smooth edges: 10, 5, 2, and 1 lari coins.

n.a. Not available.

^{*}Smooth edge: 50 francs, 2.55 gr. 25 franc, and 1.55 gr. 10 franc coins. Reeded edges: All other denominations.

MALTA

Denomination	Coinage in 1977	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Pieces	Grams		mm.	mm.
Numismatic coins:					
50 pounds	n.a.		916 gold	28.00	n.a.
20 pounds	n.a.	6.00	do	22.00	n.a.
10 pounds	n.a.		do	19.00	n.a.
4 pounds	n.a.		987 silver	38.00	n.a.
2 pounds	n.a.	10.00	do	32.00	n.a.
Subtotal	n.a.				
Suototai					
Danilar insua I					
Regular issue: 1		13.60	75% copper, 25% nickel	31.19	
	1,000,000		79% copper, 20% zinc, 1%	28.17	n.a.
25 cents	1,000,000	10.40	nickel.	20.17	n.a.
10 cents	500,000	11.31	75% copper, 25% nickel	28.50	n.a.
5 cents			do	23.60	n.a.
2 cents		2.26	do	17.78	n.a.
1 cent		7.13	97% copper, 2.5% zinc, 0.5% tin.	25.91	n.a.
5 mils		2.11	Aluminum	26.00	n.a.
3 mils			do	23.11	n.a.
2 mils			do	20.31	n.a.
Subtotal	1,500,000				
Total	1,500,000				

¹ Coins for regular issue were produced by mints in the United Kingdom. The 25 cent coins were dated 1975; the 10 cent coins bore 1972.

^{*}Smooth edges: 50 and 25 cent pieces and 5, 3, and 2 mils. Milled edges: 10, 5, 2, and 1 cent coins and all numismatic coins.

n.a. Not available.

MARQUEZAS ISLANDS-See French Polynesia

MAURITANIA, ISLAMIC REPUBLIC OF

MAURITIUS

Denomination	Coinage in 1977 ¹	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Pieces	Grams		mm.	mm.
1,000 rupees 2	1	33.43	900 gold, 100 silver	34.00	2.49
200 rupees		15.56	916.6 gold	27.76	n.a.
50 rupees ²	100	35.00	925 silver	42.00	2.87
Do 2	100	31.65	500 silver, 500 copper	42.00	2.87
25 rupees ³	36,500		925 silver	38.61	2.75
Do ²	100	25.31	500 silver, 500 copper	38.61	2.75
1 rupee	2,200,000	11.66	75% copper, 25% nickel	30.00	2.44
50 cents	3,400,000	5.83	do	23.60	n.a.
25 cents	6,400,000	2.91	do	19.00	n.a.
10 cents (12 scallops)		5.18	do	23.50	1.75
5 cents		9.72	95.5% copper, 3% tin, 1.5% zinc.	28.40	1.70
Do	900,000	9.72	97% copper, 2.5% zinc, 0.5%		
			nickel.	28.40	1.70
2 cents	4,000,000	3.89	do	23.10	1.02
Do		3.89	95.5% copper, 3% tin, 1.5% zinc.	23.10	1.02
1 cent		1.94	do	17.80	.91
Do	1,250,000		97% copper, 2.5% zinc, 0.5%		
			nickel.	17.80	.91
Total	18,186,801				

¹ Coins, made by mints in the United Kingdom, were dated 1975, except the gold and silver coins which bore 1977.

² Part of the World Wildlife Conservation Series, calling attention to endangered species of wildlife. The 1,000 rupees and the 925 fine 50 rupees were proof.

³ Consists of 15,000 Conservation coins and 21,500 proof coins commemorating the Silver Jubilee of Queen Elizabeh II (dated 1952–1977).

^{*}Smooth edges: 10, 5, 2, and 1 cent coins. Milled edges: 1,000, 200, 50, and 25 rupees and 25 cents. Security edges. I rupee and 50 cents.

n.a. Not available.



Coinage of Mexico

MEXICO

Denomination	Coinage in 1977	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Pieces	Grams		mm.	mm.
100 pesos	5,225,000	27.78	720 silver, 280 copper	39.00	2.84
25 pesos		22.50	do	38.00	2.56
10 pesos ²	79,620,000	10.00	75% copper, 25% nickel	30.50	2.40
5 pesos	102,000,000	14.00	do	33.00	2.22
1 peso	94,364,000	9.00	do	29.00	1.91
50 centavos	12,410,000		do	25.00	1.83
20 centavos	394,350,000	3.00	do	20.00	1.36
Do		10.00	95% copper, 5% zinc	28.50	2.18
10 centavos	144,650,000	1.50	75% copper, 25% nickel	15.00	1.16
5 centavos			85% copper, 15% zinc	18.00	1.45
Do			95% copper, 5% zinc	18.00	1.45
1 centavo			do	13.00	1.48
Total	832,619,000				

¹ Made by the Mexican Government Mints. Coins were dated 1977.

MONACO

Denomination	Coinage in 1977	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Pieces	Grams		mm.	mm.
10 francs		25.0	900 silver, 100 copper	37.0	n.a.
5 francs		12.0	835 silver, 165 copper	29.0	2.10
1 franc		6.0	Pure nickel	24.0	1.90
√₂ franc		4.5	do	19.5	2.10
50 centimes		7.0	92% copper, 6% aluminum, 2% nickel.	25.0	n.a.
20 centimes		4.0	do	23.5	1.50
10 centimes		3.0	do	20.0	1.50

^{*}Reeded edges: 10, 5, 1, and $\frac{1}{2}$ franc coins. Smooth edges: 50, 20, and 10 centimes. n.a. Not available.

NOTE.—French coins also circulate in Monaco.

MONGOLIAN PEOPLE'S REPUBLIC

Denomination	Coinage in 1977 ¹	Gross weight	Metallic composition	Diam- eter	Thickness and edge *
750 tukhrik	Pieces 333 2,328 2,890 5,551	35.00	900 gold	<i>mm</i> . 34.00 42.00 38.61	

¹ 1977 coinage, manufactured by mints in the United Kingdom, was dated 1976. Coins were part of the World Wildlife Conservation series drawing attention to endangered species of wildlife. 123 750 tukhrik, 500 50 tukhrik, and 1,068 25 tukhrik were proof coins.

Note.—The basic monetary unit, the tukhrik, is divided into 100 mongo.

² Seven-sided coin.

^{*}Milled edges: 1 peso, cupronickel 50, 20, and 10 centavos. Smooth edges: 10 pesos, 20, 5, and 1 centavo coins. Lettered edge: 100, 25 and 5 pesos coins.

^{*} Reeded edges: All denominations.



MOROCCO

Denomination	Coinage in 1977 i	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Pieces	Grams		mm.	mm.
250 dırhams ²	5,050	6.45	900 gold, 100 silver	21.00	n a.
Do 3	20	9.67	do	21.00	n.a.
50 dirhams ³	20]	60.45	do	42.00	n a.
Do 3	10	90.52	do	42.00	n.a.
Do 4	15,800	35.36	925 silver, 75 copper	42.00	n.a.
Do		52.86	do	42.00	n.a.
5 dirhams		23.65	900 gold, 100 silver	29.00	n.a.
Do		35.48	do	29.00	n.a.
Do		12.00	75% copper, 25% nickel	29.00	n.a.
Do			925 silver	29.00	n.a.
1 dirham		6.00	900 gold	24.00	1.82
Do 5	1,900,000	6.00	75% copper, 25% nickel	24.00	1.82
50 centimes			900 gold	21.00	2.20
Do 5	13,900,000	4.00	75% copper, 25% nickel	21.00	2.20
20 centimes		4.00	900 gold	23.00	1.60
Do	22,800,000	4.00	92% copper, 6% aluminum, 2% nickel.	23.00	1.60
10 centimes		3.00	900 gold	20.00	1.60
Do 5	14,000,000	3.00	92% copper, 6% aluminum, 2% nickel.	20.00	1.60
5 centimes		2.00	900 gold	17.50	1.90
Do 5	2,400,000	2.00	92% copper, 6% aluminum, 2% nickel.	17.50	1.90
1 centime		.70	900 gold	17.00	1.40
Do		.70	Aluminum	17.00	1.40
Total	55,020,900				

¹ 1977 coinage made by mints in the United Kingdom.

NOTE.—From July 1974 the "centime" replaced the "franc" in Moroccan coinage, pursuant to Moroccan Law 1–72–123, July 27, 1972. The coins bear the centime designation in Arabic script.

Previous issues of Moroccan coins also outstanding in 1977

Denomination	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Grams		mm.	mm.
5 dirhams	11.75	720 silver, 280 copper	29	2.20
1 dirham		do	24	1.82
Do	6.00	Pure nickel	24	1.82
500 francs	22.50	900 silver, 100 copper	36	2.70
200 francs	8.00	720 silver, 280 copper	27	1.70
100 francs		do	22	1.30
50 francs	8.00	92% copper, 6% aluminum,	27	2.20
		2% nickel.		
20 francs	4.00	do	23	1.60
10 francs	3.00	do	20	1.60
5 francs	1.85	99% aluminum, 1% other	25	1.90
2 francs	1.20	do	22	1.60
1 franc	.80	do	19	1.40

^{*}Milled edges: 5 and 1 dirham coins, 500, 200, 100 francs. Smooth edges: 50, 20, 10, 5, 2, and 1 franc coins.

² Coins commemorate various birthdays of King Hassan 11. Consists of 250 proof coins dated 1395–1975, 250 proof coins dated 1396–1976, and 4,550 (1,050 proof) coins dated 1397–1977.

³ Proof coins dated 1397–1977.

⁴Consists of the following commemorative issues: 4,950 coins dated 1395–1975 marking International Women's Year: 4,650 coins dated 1395–1975 commemorating the 20th anniversary of Moroccan independence; 3,000 coins dated 1396–1976 commemorating the first anniversary of the Green March into the Spanish Sahara; and 3,200 (200 proof) 1397–1977-dated coins honoring the second anniversary of the Green March.

³ Issued in connection with FAO food coin plan, with dates 1394–1974.

^{*}Reeded edges: 250, 50, and 1 dirhams; 50, 20, and 10 centimes. Smooth edges: 5 and 1 centimes.

n.a. Not available.

MOZAMBIQUE

Denomination	Coinage in 1977	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Pieces	Grams		mm.	mm.
Escudo-centavo system:					
20 escudos		10.00	680 silver, 320 copper	30.00	1.70
Do		10.00	720 silver, 280 copper	30.00	1.50
Do			Pure nickel	30.00	2.12
10 escudos		9.00	75% copper, 25% nickel	28.00	2.00
Do			75% copper, 25% zinc	28.00	2.10
5 escudos		4.00	600 silver, 400 copper	22.00	1.00
Do		7.00	75% copper, 25% nickel	24.50	2.00
2½ escudos		3.50	do	20.00	1.50
1 escudo		8.00	95% copper, 3% zinc, 2% tin.	26.00	2.10
50 centavos			do	22.50	1.50
20 centavos		3.00	do	20.50	1.10
Do		1.80	do	16.00	1.20
10 centavos		1.80	do	16.00	1.10
Subtotal					
Metica-centimo system:					
2½ meticas		13.50	75% copper, 25% nickel	30.00	n.a.
1 metica			do	28.50	n.a.
50 centimos		1	do	23.60	n.a.
20 centimos		1	do	19.41	n.a.
10 centimos			97% copper, 2.5% zinc,	25.91	n.a.
ro centinos	*******	,	0.5% tin.	23.71	11.4.
5 centimos		3.56	do	20.32	n.a.
2 centimos		1.78	do	17.15	n.a.
1 centimo		.50	Aluminum	16.00	n.a.
Total					

^{*}Serrated edges: 1 metica, 50, and 20 centimos; 20, 10, 5, and 2½ escudos. Smooth edges: 2½ meticas; 10, 5, 2, and 1 centimos coins; 1 escudo; 50, 20, and 10 centavos.

n.a. Not available.

Note.—Formerly Portuguese East Africa, Mozambique was granted independence on June 25, 1975. The escudo monetary system has been retained; conversion to the metica-centimo system has been delayed indefinitely.

NEPAL

Denomination	Coinage in 1977 ¹	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Pieces	Grams		mm.	mm.
1 asarfi		33.43	900 gold, 100 silver	34.00	2 49
50 rupees		35.00	925 silver	42.00	2.87
Do ²	100	31.65	500 silver, 500 copper	42.00	2.87
25 rupees ²	100	28.28	925 silver	38.61	2.75
Do		17.00	600 silver, 400 copper	36.00	n.a.
Do ²	100	25.31.	500 silver, 500 copper	38.61	2.75
20 rupees		15.00	500 silver, 400 copper,	33.00	n.a.
·			100 nickel.		
10 rupees		8.00	250 silver, 600 copper,	29.00	n.a.
			150 nickel		
1 rupee	30,057,535	7.50	75% copper, 25% nickel	27.50	1.85
Do			do	26.50	n.a.
50 paisa	4,540,788	5.00	do	23.50	1.31
25 paisa	2,274,880	3.00	do	19.00	1.21
10 paisa		1.40	100% aluminum	22.00	n.a
Do	4,683,761	2.20	66% copper, 34% zinc	18.50	n.a.
Do			do	21.00	1.34
5 paisa	27,222,282		100% aluminum	20.50	1.31
2 paisa		.90	do	18.50	1.21
1 paisa	1,039,866	.60	do	16.50	1.01
Total	69,819,412				

¹ Production for general circulation by His Majesty's Government Mint, Kathmandu, except for the 30 million 1 rupee coins, which were struck by the Royal Canadian Mint. The lower denomination coins for regular issue were dated 2034, except for 57,535 of the 1 rupee coins which bore the year 2033.

² Dated 2031, and believed to be part of the World Wildlife Conservation coin series, calling attention to endangered species of wildlife. The 925 fine 25 rupees were proof coins dated 2033. These coins were made by mints in the United Kingdom.

n.a. Not available.

^{*}Milled edges: 1 asarfi; 50, 25, 20, 10, 1 rupee coins; 50 and 25 paisa. Smooth edges: 10, 5, 2, and 1 paisa coins.

Previous issues of Nepalese coins

Denomination	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Grams			wa wa
Dalila Ashace		995 gold, 5 other	<i>mm</i> . 25.20	<i>mm</i> .
Bakla Ashrafi		do	25.20	.61
Patla Ashrafi		do	18.29	.28
1/6 Ashrafi		800 silver, 200 copper	29.60	1.60
Dabal (1 rupee)		333.3 silver, 666.7 copper	29.60	1.60
Do		75% copper, 25% nickel	29.60	1.90
Do		do	28.60	2.34
Do		800 silver, 200 copper	25.20	1.20
Mohar (50 pice)	5.54	333.3 silver, 666.7 copper	25.20	1.20
Do			25.20	1.40
Do		75% copper, 25% nickel	24.80	1.40
Do		do	19.10	1.40
Suka (25 pice)		do	19.10	1.10
Do			18.30	.90
Pachanni		333.3 silver, 666.7 copper	17.80	1.10
Do		75% copper, 25% nickel		
Das paise (10 pice)		95% copper, 5% zinc	24.80	1.50
Do		do	24.80	1.30
Do		95% copper, 5% aluminum	24.80	1.30
Panch paise (5 pice)		95% copper, 5% zinc	22.20	1.00
<u>D</u> o		do	20.80	1.00
<u>D</u> o		95% copper, 5% aluminum	22.20	1.00
Do		70% copper, 20% nickel, 10% zinc	20.30	1.00
4 pice 1		66% copper, 34% zinc	19.10	n.a.
Dui paise (2 pice)	3.89	do	22.90	1.10
Do		do	20.80	.90
Do		do	19.10	.90
Do		do	19.00	.90
Ek_paise (1 pice)		do	16.50	.80
Do		do	16.50	.80
Do		do	20.10	.70
Do	1.62	do	18.30	.70

¹ Coin has central hole.

NOTE.—There are 100 pice to the dabal.

NETHERLANDS

Denomination	Coinage in 1977 ¹	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
10 guilders	7ieces 38,000,000 55,000,000 100,000,000 50,000,000 15,000,000	10.00 6.00 3.00 1.50 3.50	720 silver, 280 copper Pure nickeldododododo	<i>mm</i> . 38.00 29.00 25.00 19.00 15.00 21.00 17.00	mm. 2.60 2.30 1.80 1.50 1.20 1.30

¹ Coins made at Netherlands Government Mint, Utrecht, and dated 1977.

^{*}Not available.

^{*}Lettered edges: 10, 21/2, and 1 guilders. Milled edges: 25 and 10 cents. Smooth edges: 5 and 1 cent coins.

NETHERLANDS ANTILLES (CURACAO)

Denomination	Coinage in 1977 i	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Pieces	Grams		mm.	mm.
200 guilders 2	8,532	14.55	500 gold	33.00	1.90
25 guilders ²	2,000		925 silver	45.00	n.a.
2½ guilders	100,000	14.00	Pure nickel	32.00	2.60
1 guilder		10.00	720 silver, 280 copper	28.00	2.00
Do		9.00	Pure nickel	28.00	2.10
25 cents		3.58	640 silver, 360 copper	19.00	1.50
Do	1,000,000	3.50	Pure nickel	20.00	1.60
10 cents		1.40	640 silver, 360 copper	15.00	1.10
Do	1,000,000	2.00	Pure nickel	16.00	1.40
5 cents ³	1,000,000	4.50	75% copper, 25% nickel	18.00	1.80
2½ cents		4.00	95% copper, 4% zinc, 1% tin.	23.50	1.40
Do	1,400,000	4.00	95% copper, 4% tin, 1% zinc.	22.00	1.60
1 cent	4,400,000	2.50	do	18.00	1.40
Do		2.50	95% copper, 4% zinc, 1% tin.	19.00	1.40
Total	8,910,532				

¹ 1977 circulation coinage was made by Netherlands Government Mint, Utrecht. The 2½ guilders were dated 1978; 400,000 2½ and 1 cent coins bore 1976. All others were dated 1977.

NEW CALEDONIA

Denomination	Coinage in 1977 1	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Pieces	Grams		mm.	mm.
100 francs		10.00	92% copper, 6% nickel, 2%	30.00	n.a.
			aluminum.		
50 francs			Pure nickel	33.00	2.20
20 francs		10.00	do	28.50	2.10
10 francs		6.00	do	24.00	1.80
5 francs		3.50	95% aluminum, 5% magnesium.	31.00	n.a.
2 francs	1,000,000	2.20	do	27.00	n.a.
1 franc	1,000,000	1.30	do	23.00	n.a.
Total	2,000,000				

¹ 1977 coinage was produced by the French Government Mint, Paris, and dated 1977.

² Commemorative coins, dated 1977, which are believed to have been struck by a private mint. The 200 guilder coin is 8-sided.

³ Square coin with rounded corners. (Diameter measurement across sides.)

^{*}Lettered edges: 25, 2½, and silver 1 guilder. Smooth edges: Nickel 1 guilder, 5, 2½, and 1 cent pieces. Milled edges: 25 and 10 cent coins.

n.a. Not available.

^{*}Milled edges: 100, 50, 20, and 10 francs. Smooth edges: 2 and 1 franc coins. Other denominations not reported. n.a. Not available.

NEW GUINEA-See Papua New Guinea

NEW HEBRIDES

Denomination	Coinage in 1977	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Pieces	Grams		mm.	mm.
100 francs		25.00	835 silver, 165 copper	37.00	2.60
50 francs			Pure nickel	33.00	n.a.
20 francs		10.00	do	28.50	2.10
10 francs		6.00	do	24.00	1.80
5 francs		4.00	92% copper, 6% aluminum, 2% nickel.	23.50	n.a.
2 francs		3.00	do	20.00	n.a.
1 franc			do	17.00	n.a.
Total					

^{*}Reeded edges: 100, 50, 20, and 10 francs. Smooth edges: 5, 2, and 1 franc pieces.

NEW ZEALAND

Denomination	Coinage in 1977 ¹	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Pieces	Grams		mm.	mm.
1 dollar	27,000	27.22	925 silver, 75 copper	38.74	3.07
Do	13,439		75% copper, 25% nickel	38.74	3.07
50 cents	2,000,415	13.61	do	31.75	2.24
20 cents	7,500,415	11.31	do	28.57	2.29
10 cents	5,000,415		do	23.62	1.73
5 cents	415	2.83	do	19.43	1.35
2 cents	20,000,415	4.15	97% copper, 2.5% zinc,	21.08	1.60
			0.5% tin.		
1 cent	415	2.07	do	17.53	1.17
Total	34,542,929				

¹ 1977 coinage, manufactured by mints in the United Kingdom, was dated 1977. The silver dollar coins were proof. *Edge of 50 cents has alternate milled and smooth sections. Milled edges: \$1, 20, 10, and 5 cents. Smooth edges: 2 cents

Nondecimal coins of New Zealand in circulation in 1977

Denomination issued under pound-shilling-pence system	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
Florin (2 shillings)	5.66	75% copper, 25% nickel do do	<i>mm</i> . 28.57 23.62 19.43	<i>mm</i> . 2.29 1.73 1.35

^{*}Not reported.

and 1 cent.

Note.—In addition to the New Hebrides coins, Australian, metropolitan French, and United Kingdom coins circulate in New Hebrides.

NICARAGUA

Denomination	Coinage in 1977	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Pieces	Grams		mm.	mm.
Commemorative coins: 2					
2,000 cordobas		19.20	900 gold	32.00	n.a.
1,000 cordobas	443	9.72	do	25.00	1.43
500 cordobas		5.40	do	21.00	n.a.
200 cordobas			do	15.00	n.a.
100 cordobas	· ·	25.14	925 silver	40.00	n.a.
50 cordobas	7,064		do	30.00	n.a.
20 cordobas	3,532	5.03	do	22.00	n.a.
Subtotal	18,103				
Regular issue:					
1 cordoba		9.50	75% copper, 25% nickel	29.00	n.a.
50 centavos		8.00	do	26.00	2.00
25 centavos			do	23.00	1.80
10 centavos		1.25	Aluminum with 4% magnesium	20.00	1.80
5 centavos		1.50	do	21.50	n.a.
Total	18,103				

¹1977 comage was made by mints in the United Kingdom, except for the 1,000 cordobas which were made by the Royal Canadian Mint. All coinage was dated 1975.

NIGERIA

Denomination	Coinage in 1977 ¹	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
25 kobo	34,144,000	4.00 2.76 5.80 3.50	75% copper, 25% nickeldodo97% copper, 2.5% zinc, 0.5% tindo	mm. 26.92 22.86 20.00 25.00	mm. 2.20 1.30 1.10 1.10

¹ 1977 coinage, manufactured by the Nigerian Security Printing and Minting Company, Ltd., was dated 1973.

²Coins in this series honor the Bicentennial of American independence and express Nicaragua's gratitude for World assistance following the 1972 Managua earthquake.

^{*}Milled edges: All denominations.

n.a. Not available.

^{*}Reeded edges: 25, 10, and 5 kobo. Smooth edges: 1 and ½ kobo.



Coinage of Norway

NORWAY

Denomination	Comage in 1977 i	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
25 kroner	4,629,600 26,263,500 19,411,750 20,150,000 43,304,000 29,646,000	11.50 7.00 4.80 2.40 1.50 8.00	875 silver, 125 copper	mm. 39.00 29.50 25.00 22.00 17.00 15.00 27.00 19.00	mm. 2.90 2.23 1.83 1.63 1.40 1.18 1.75 1.48

Previous issues of Norwegian coins in circulation in 1977

Denomination and years issued	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Grams		mm.	mm.
1 krone (1924–51)	7.0	75% copper, 25% nickel	1 25	2.05
1 krone (1951–57)	7.0	do	² 25	1.94
50 ore (1924–51)	4.8	do	1 22	1.80
50 ore (1951–57)	4.8	do	² 22	1.75
25 ore (1924–51)	2.4	do	117	1.60
25 ore (1951–57)	2.4	do	² 17	1.42
10 ore (1924–51)	1.5	do	115	1.33
10 ore (1951–57)		do	² 15	1.20
5 ore (1924–51)	8.0	95% copper, 4% tin, 1% zinc	² 27	1.88
5 ore (1951–57)		do	² 27	1.88

¹ Perforated.

¹ The 1977 coinage, made by the Royal Mint of Norway, bears the date 1977. *Incused lettered edge: 5 kr. Milled edges: 1 kr. 50, 25, and 10 ore. Smooth edge: 5 ore.

² Not perforated.

^{*}Smooth edges: All denominations.

OMAN

Denomination	Coinage in 1977 ¹	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Pieces	Grams		mm.	mm.
75 rial ²	1,076	33.44	900 gold, 100 silver	34.00	2.49
15 rial		22.05	916.6 gold	22.05	n.a.
5 rial		28.00	925 silver	38.70	2.38
Do 2	10,240	35.00	do	34.00	2.87
Do	1,000	46.65	916.6 gold	38.74	n.a.
2½ rial²	10,550		925 silver, 75 copper	38.61	2.75
1 rial			925 silver	32.13	1.91
Do	1,000	25.60	916.6 gold	33.02	n.a.
½ rial		8.00	925 silver	24.26	1.68
Do	1,000		916.6 gold	28.40	n.a.
¼ rial			925 silver	19.05	1.35
Do	1,000		916.6 gold	20.00	n.a.
100 baizas			75% copper, 25% nickel	28.50	2.24
Do			916.6 gold	28.50	n.a.
50 baizas			75% copper, 25% nickel	24.00	1.85
Do			916.6 gold	24.00	n.a.
25 baizas			75% copper, 25% nickel	18.00	n.a.
Do			916.6 gold	18.00	n.a.
20 baizas			75% copper, 25% nickel	n.a.	n.a.
10 baizas		4.76	97% copper, 2.5% zinc,	22.50	1.60
			0.5% tin.		
5 baizas			do	19.00	n.a.
2 baizas		1.75	do	15.98	1.24
Total	25,866				

¹ 1977 coinage was made by mints in the United Kindgom and dated 1397. The 916 fine gold coins were proof. ² Part of the World Wildlife Conservation series, drawing attention to endangered species of wildlife. 251 75 rials, 4,940 rials, and 5,250 2½ rials were proof coins.

⁵ rials, and 5,250 2½ rials were proof coins.

*Milled edges: 75, 15, 5, 2½, 1, ½, and gold ¼ rials and 100, 50, and 25 baizas. Smooth edges: Silver ¼ rial, 10, 5, and 2 baizas. 20 baizas edge unknown.

n.a. Not available.

PAKISTAN

Denomination	Coinage in 1977 1	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Pieces	Grams		mm.	mm.
3,000 rupees 2	988	33.44	900 gold	34.00	2.49
1,000 rupees ³	n.a.	7.29	916.6 gold	25.00	n.a.
500 rupees 4	n.a.		do	19.00	n.a.
150 rupees ²	7,379		925 silver	42.00	2.87
100 rupees 5	n.a.	20.44	do	36.00	n.a.
Do ²	7,405	28.28	do	38.61	2.75
1 rupee 6	10,074,000	7.50	75% copper, 25% nickel	27.50	1.72
50 paisa 7	5,600,000		do	24.00	1.75
Do	5,548,000	5.00	do	23.00	1.75
25 paisa	22,092,000	4.00	do	20.00	1.75
10 paisa (Scalloped).		4.00	do	22.00	1.45
Do	29,045,000	1.60	Pure aluminum	22.00	1.35
5 paisa (square)	32,840,000	1.25	do	21.00	1.30
2 paisa (Scalloped)		1.00	do	19.50	1.45
1 paisa	62,780,000	.75	do	17.00	1.25
Total	167,994,772				

¹1977 coinage for general circulation was produced by the Pakistan Mint, Lahore. Numismatic coin production was allocated as follows: 3,000, 150, and 28.28 gram 100 rupees were made by mints in the United Kingdom; 1,000, 500, and 20.44 gram 100 rupees made by Valcambi, S.A., Switzerland, production details not available. Coins were dated 1977, except for the 5.83 gram 50 paisa which bore 1976, and as specified below for numismatic coins.

² Part of the World Wildlife Conservation series, dated 1976.

Previous issues of Pakistani coins in circulation in 1977

Denomination	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Grams		mm.	mm.
1 rupee	11.66	Pure nickel	27.94	2.39
½ rupee	5.83	do	24.13	1.73
¼ rupee	2.92	do	19.05	1.50
50 paisa	5.83	do	24.00	1.70
25 paisa	2.92	do	19.00	1.50
10 paisa	5.00	75% copper, 25% nickel	(1)	1.75
5 paisa (square)		79% copper, 20% zinc, 1% nickel	21.00	1.50
2 paisa	.75	Pure aluminum	18.00	1.50
1 paisa	1.50	79% copper, 20% zinc, 1% tin	17.00	1.02
Ďo	1.50	do	20.60	.76

¹ 12 scallops with greater diameter of 23 mm. and lesser diameter of 21.89 mm.

³ Commemorates the Islamic Summit Conference held in Lahore in 1974, dated 1977.

⁴ Honors the 100th anniversary of the birth of Allama Muhammad Iqbal, dated 1877-1977.

⁵ Consists of coins honoring the Islamic Summit and the anniversary of the birth of Allama Muhammad Iqbal.

⁶ Consists of 5,074,000 Islamic Summit coins and 5,000,000 Allama Muhammad Iqbal commemoratives.

⁷ Commemorate the 100th anniversary of the birth of Quaid-e-Azam Mohammad Ali Jinnah, the founder of Pakistan.

^{*}Serrated edges: 3,000, 1,000, 500, 150, 100, and 1 rupees, 50 and 25 paisa. 12 scallops with waved, smooth edges: 10 paisa coins. 8 scallops with waved, smooth edges: 2 paisa aluminum coins. Smooth edges: 5 and 1 paisa.

n.a. Not available.

^{*}Serrated edges: 1, ½, ¼, rupees, 50, and 25 paisa. Waved edge: 10 paisa. Smooth edge: 1 paisa.



Coinage of Pakistan

PANAMA, REPUBLIC OF

Denomination	Coinage in 1977 i	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Pieces	Grams		mm.	mm.
500 balboas 2	2,049		900 gold	45.00	n.a.
100 balboas 3	5,466		do	26.00	n.a.
20 balboas 4	29,864		925 silver, 75 copper	61.00	5.72
5 balboas	9,548		do	39.00	3.20
Do	125	35.12	75% copper, 25% nickel	39.00	n.a.
Do	9,000	30.32	3-layer composite: outer cladding 75% copper, 25% nickel bonded to a core of pure copper.	39.00	3.30
1 balboa		26.73	900 silver, 100 copper	38.10	2.72
Do	11,296		925 silver	38.10	n.a.
Do	625		75% copper, 25% nickel	38.10	n.a.
½ balboa	10,798		do	30.61	n.a.
Do			3-layer composite: outer cladding 800 silver, 200 copper bonded to a core of approximately 200 silver, 800 copper.	30.61	1.98
Do	32,000	11.50	3-layer composite: outer cladding 75% copper, 25% nickel bonded to a core of pure copper.	30.61	1.98
1/4 balboa	52,000	5.67	do	24.26	1.83
Do	12,048	5.67	75% copper, 25% nickel	24.26	n.a.
¹/10 balboa	15,798	2.27	do	17.91	1.30
Do	70,000	2.27	3-layer composite: outer cladding 75% copper, 25% nickel bonded to a core of pure copper.	17.91	1.30
5 centésimos	100,000		do	21.21	1.78
Do	22,048		75% copper, 25% nickel	21.21	1.78
2½ centésimos	34,548	1.24	do	10.00	n.a.
Do	60,000	1.24	3-layer composite: outer cladding 75% copper, 25% nickel bonded to a core of pure copper.	10.00	2.00
1 centésimo	10,072,048	3 11	95% copper, 5% zinc	19.05	1.63
Do	550,000		3-layer composite: outer cladding 75% copper, 25% nickel bonded to a core of pure copper.	19.05	1.63
Total	11,099,261				

¹⁹⁷⁷ comage was produced as follows: All clad coins were manufactured by the Royal Canadian Mint and dated partially 1975 and partially 1976; 10,000,000 I centésimo coins were manufactured by the U.S. Mint and were dated 1977; the remaining coins were made by the Franklin Mint, a private mint in the United States, and bore the year 1977. The silver 5 and 1 balboas and 9,548 each of the nonclad 50 through 1 centésimo coins were proof.

NOTE .- U.S. coins also circulate in Panama.

² Consists of 1,980 proof, 59 uncirculated, and 10 circulation coins.

^a Consists of 5,092 proof, 324 uncirculated, and 50 circulation coins.

⁴ Consists of 24,485 proof, 2,879 uncirculated, and 2,500 circulation coins.

^{*} Reeded edges: 20, 5, 1, ½, ¼, and ½ balboa coins. Smooth edges: 5, 2½, and 1 centésimo coins. n.a. Not available

PAPUA NEW GUINEA

Denomination	Coinage in 1977	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Pieces	Grams		mm.	mm.
1 kina		14.52	75% copper, 25% nickel	32.87	2.60
20 toea		11.30	do	28.52	n.a.
10 toea		5.65	do	23.59	n.a.
5 toea		2.83	do	19.40	n.a.
2 toea		4.15	97% copper, 2.5% zinc, 0.5% tin.	21.59	n.a.
1 toea		2.07	do	17.52	n.a.
Total					

^{*}Reeded edges: 1 kina, 20, 10, and 5 toea. Smooth edges: 2 and 1 toea coins. n.a. Not available.

PARAGUAY

Denomination	Coinage in 1977	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
50 guaranies		4.15 3.43	Stainless steeldodododo	<i>mm</i> . 26.00 22.00 20.00 18.00	1.50

^{*}Smooth edges: All denominations.

PERU

Denomination	Coinage in 1977 1	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
200 soles	94,272,000 2,100,000 18,943,000	22.00 8.00 11.63 4.30 3.20 2.15	800 silver, 200 copperdo 900 silver, 100 copper 60% copper, 25% zinc, 15% nickeldo 70% copper, 30% zincdodo	mm. 37.00 37.00 26.40 31.00 22.50 21.00 18.00 16.50	mm. 2.00 2.00 1.42 1.80 1.24 1.07 1.02 1.00
10 centavos	115,315,000	1.50	do	15.00	.98

¹⁹⁷⁷ coinage was made by Government Mint of Peru, except for the 1 soles which were made by the U.S. Mint, Philadelphia. All coins bore the year 1977, except the 1 soles, which were dated 1976.

*Serrated edges: 200, 100, and 10 soles. Smooth edges: 5, 1, and ½ soles, 20 and 10 centavos.



PHILIPPINES

Denomination	Coinage in 1977 i	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
5,000 pisos ²	Pieces 3,923 12,000 21,005 18,132	20.45 9.95 28.00 25.00	900 gold	<i>mm</i> . 50.00 33.25 27.74 40.00 38.00	<i>mm.</i> n.a. n.a. n.a. n.a.
5 pisos	18,132 20,132 18,132 518,132 1,106,132 18,132	9.50 4.00 2.00 2.50	Pure nickel	36.00 29.00 21.00 18.00 (6) (7)	2.60 2.00 1.70 1.30 1.40 2.40
Total	1,753,852				

¹1977 coinage, the third year of the "Ang Bagong Lipunan" or "New Society" series, bore the year 1977. Production included 6,807 proof sets (denominations 50 piso through 1 sentimo), 2,873 individual proof 50 pisos, and 1,325 uncirculated coins of each of the denominations 50 piso through 1 sentimo produced by the Franklin Mint, a private mint in the United States. In addition, the Franklin Mint made 10,000 circulating coins in these denominations, with the exception of the 1 piso, of which 12,000 circulating pieces were struck. In addition, the Central Bank of the Philippines, Gold Refinery and Mint made 500,000 10 sentimos and the U.S. Mint produced 1,088,000 (1976-dated) 5 sentimos.

² Commemorates the 5th anniversary of the New Society. Consists of 3,823 proof and 100 uncirculated coins.

⁴ Commemorates the opening of the Central Bank Security Printing Plant and Mint complex.

⁶ Scalloped coin measuring 19 mm. at outer edge, 17 mm. at inner edge.

n.a. Not available.

Note.—For detail of designs on "New Society" coins, see Philippines table in the edition of this report, covering calendar year 1975 foreign coinage.

Other Philippine coins in circulation in 1977

Denomination	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Grams		mm.	mm.
1 piso	14.50	70% copper, 18% zinc, 12% nickel	32.50	2.20
50 sentimos	8.00	do	27.50	1.90
25 sentimos	4.00	do	21.00	1.75
10 sentimos	2.00	do	17.90	1.24
5 sentimos	2.50	60% copper, 40% zinc	18.40	1.45
1 sentimos	.49	95% aluminum, 5% magnesium	15.25	1.36
50 centavos	10.22	70% copper, 18% zinc, 12% nickel	30.61	2.03
25 centavos	5.11	do	24.26	1.65
10 centavos	2.04	do	17.91	1.19
5 centavos	4.85	80% copper, 20% zinc	21.21	1.90
1 centavo		95% copper, 5% zinc	19.05	1.52

^{*}Reeded edges: 1 piso, 50, 25, and 10 sentimos, 50, 25, and 10 centavos. Smooth edges: 5 and 1 sentimos coins, 5 and 1 centavos coins.

³ Consists of 7,000 proof and 5,000 uncirculated coins commemorating the 5th anniversary of the New Society. Produced by the Trade Development Bank, Geneva, Switzerland.

⁵ Commemorates the Philippines' achievement of self-sufficiency in rice production.

⁷ Square coin with rounded corners measuring 19 mm. diagonally and 16.5 mm. across flats.

^{*}Smooth edges: 1,000, 50, 25, and 5 pisos, 5 and 1 sentimo coins. Milled edges: 5,000, 1,500 and 1 piso coins, 25, and 10 sentimos coins.

POLAND

Denomination	Coinage in	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Pieces	Grams		mm.	mm.
2,000 zloty 2	4,000	8.00	900 gold, 50 silver, 50 copper.	21.00	1.75
500 zloty		29.90	do	32.00	2.65
200 zloty		14.50	725 silver, 275 copper	31.00	2.45
Do		14.50	625 silver, 375 copper	31.00	2.45
100 zloty ³	90,000	16.50	do	32.00	2.55
20 zloty	n.a.	10.15	75% copper, 25% nickel	29.00	2.20
10 zloty	n.a.	9.50	do	28.00	2.20
Do	n.a.	7.70	do	25.00	2.30
5 zloty	n.a.	3.45	98% aluminum, 2% magnesium and manganese.	29.00	2.70
2 zloty	n.a.	2.70	do	27.00	2.30
1 zloty	n.a.	2.20	do	25.00	2.20
50 grosz	n.a.	1.60	do	23.00	1.90
20 grosz	n.a.	1.00	do	20.00	1.50
10 grosz	n.a.	.70	do	17.00	1.30
5 grosz	n.a.	n.a.	do	16.00	1.45
Total	n.a.				

¹ 1977 coinage was produced by Mennica Panstwowa, Warsaw. Coins for general circulation were dated 1977.

² Commemorates Frederic Chopin, Polish composer and pianist, dated 1977.

³ Consists of 30,000 commemorating the Royal Palace, Wawel, and 30,000 each honoring Poland's two Nobel Prize for literature winners, Wladyslaw Reymont and Henryk Sienkiewicz.

*Reeded edges: 20, 10, 5, 2, 1 zloty and 50 grosz coins. Smooth edges: 2,000, 500, 200, 100 zloty, 20, and 10 grosz coins. n.a. Not available.

PORTUGAL

Denomination	Coinage in 1977 i	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
250 escudos ²	Pieces 32,814 29,064		680 silver, 320 copper	<i>mm</i> . 37.00 32.00	<i>mm</i> . 2.70 2.26
50 escudos	7,656,811	18.0 9.5	75% copper, 25% nickel	34.00 26.30	2.40 2.10
5 escudos	27,491,912 45,236,869 6,278,099	3.5	do	24.50 20.00 26.00	2.00 1.50 2.10
Do		8.0	61% copper, 20% zinc, 19% nickel.	26.80	2.00
Do	16,340,438	4.5	95% copper, 3% zinc, 2% tin. dodo	22.80 22.50 16.00	1.50 1.50 1.20
10 centavos	8,431,273	.5	97.5% aluminum, 2.5% magnesium.	15.00	1.30
Total	111,497,280				

¹1977 coinage was made at Portuguese Government Mint, Lisbon. The 5, 2½, and 1 escudos and 50 and 10 centavos coins were dated partially 1976 and partially 1977. The 25 escudos were dated 1977, while the remaining denominations were dated 1976.

Note.—Coins of continental Portugal circulate in Madeira and the Azores.

Commemorative issues of Portuguese coins also outstanding

Denomination	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Grams		mm.	mm.
50 escudos	18.0	650 silver, 350 copper	34	2.4
20 escudos		800 silver, 200 copper	34	2.7
Do		do	34	2.8
Do	10.0	650 silver, 350 copper	30	1.8
10 escudos	12.5	835 silver, 165 copper	30	2.2
Do	12.5	680 silver, 320 copper	30	2.3
Do	10.0	3-layer composite coin. Outer cladding 75% copper, 25% nickel bonded to a core of pure nickel.	28	2.2
5 escudos	7.0	650 silver, 350 copper	25	1.9
20 centavos		95% copper, 3% zinc, 2% tin	21	1.3
10 centavos		do	18	1.2

^{*}Serrated edges, all commemorative, except the 50 and 10 escudos, which had lettered edges.

² Commemorative issue marking the Day of the Revolution, Apr. 25, 1974; all coins were of proof quality.

^{*}Serrated edges: 250, 100, 25, 5, 2½, and old 1 escudos pieces. Smooth edges: 95% copper 1 escudo and 50, 20, and 10 centavos. Lettered edge: 50 escudos.





PORTUGUESE EAST AFRICA—See Mozambique

PORTUGUESE MACAO—See Macao

PORTUGUESE TIMOR

Denomination	Coinage in 1977	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Pieces	Grams		mm.	mm.
10 escudos		9.00	75% copper, 25% nickel	28.00	2.00
5 escudos:			do	24.50	2.00
2½ escudos			do	20.00	1.60
1 escudo		8.00	95% copper, 3% zinc, 2% tin.	22.80	2.10
50 centavos			do	20.00	1.70
20 centavos		2.50	do	22.00	1.30
10 centavos		2.00	do	18.00	1.10
Total					

^{*}Serrated edges: 10, 5, and 21/2 escudos. Smooth edges: 1 escudo, 50, 20, and 10 centavo pieces.

PORTUGUESE WEST AFRICA (ANGOLA)—See Angola

PORTUGUESE WEST AFRICA (CAPE VERDE)—See Cape Verde

PORTUGUESE WEST AFRICA (GUINEA)—See Guinea-Bissau

PORTUGUESE WEST AFRICA (SAN TOME AND PRINCIPE)—See Sao Tome and Principe

QATAR

Denomination	Coinage in 1977	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Pieces	Grams		mm.	mm.
50 dirhams		6.50	75% copper, 25% nickel	25	n.a.
25 dirhams		3.50	do	20	1.32
10 dirhams		7.50	97% copper, 2.5% zinc, 0.5% tin.	27	n.a.
5 dirhams		3.75	do	22	1.37
1 dirham		1.50	do	15	n.a.
Total					

^{*}Milled edges: 50, 25, and 10 dirhams. Smooth edges: 5 and 1 dirham coins. n.a. Not available.

RAS AL KHAIMA—See United Arab Emirates

REUNION

Denomination	Coinage in 1977	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Pieces	Grams		mm.	mm.
100 francs		8.5	Pure nickel	26.5	n.a
50 francs		6.0	92% copper, 6% aluminum, 2% nickel	24.0	n.a.
Do		6.0	Pure nickel	24.0	n.a.
20 francs			92% copper, 6% aluminum, 2% nickel.	23.5	n.a.
Do		4.0	91% copper, 9% aluminum	23.5	n.a.
10 francs			do	20.0	n.a.
Do			92% copper, 6% aluminum, 2% nickel.	20.0	n a.
5 francs		3.5	95% aluminum, 5% magnesium	31.0	n.a.
2 francs			do	27.0	n.a.
1 franc			do	23.0	n.a.
Total					

^{*}Reeded edges 100 and 50 francs. Smooth edges: All others. n.a. Not available.

RHODESIA

Denomination	Coinage in 1977 ¹	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Pieces	Grams		mm.	mm.
25 cents			75% copper, 25% nickel	n.a.	n.a.
20 cents		n.a.	do	n.a.	n.a.
10 cents	3,015,500	n.a.	do	n.a.	n.a.
5 cents	5,160,000	n.a.	do	n.a.	n.a.
2½ cents		1.40	do	16.30	.99
1 cent	30,000,000	4.00	95% copper, 4.5% zinc, 0.5% tin.	22.40	n.a.
1/2 cent	5,000,000	3.00	do	20.20	n.a.
Total	43,175,500				

¹ The 1977 coinage was made by the South African Mint.

ROMANIA, SOCIALIST REPUBLIC OF

Denomination	Coinage in 1977	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
3 lei	Pieces n.a. n.a. n.a. n.a. n.a. n.a. n.a.	4.98 3.40 2.89	Nickel-clad steel do do do do do	<i>mm</i> . 27.02 24.61 22.00 18.49 15.98	mm. 1.74 1.59 1.39 1.49 1.41

^{*}Smooth edges: All denominations.

^{*}Unofficial sources report smooth edges on the 21/2, 1, and 1/2 cent coins; reeded edges on all other coins. n.a. Not available.

n.a. Not available.

RWANDA, REPUBLIC OF

Denomination	Coinage in 1977 ¹	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Pieces	Grams		mm.	mm.
200 francs		18.00	800 silver, 200 copper	32.00	2.60
50 francs		15.00	75% copper, 25% nickel	28.50	n.a.
Do	9,000,000	9.50	92% copper, 6% aluminum, 2% nickel	28.50	n.a.
20 francs	22,000,000	8.00	do	27.00	n.a.
Do	22,000,000		75% copper, 25% nickel	27.00	n.a.
10 francs			do	30.00	2.00
5 francs			95% copper, 3% tin, 2% zinc.	25.50	1.50
Do	7,002,000		97% copper, 2.5% zinc, 0.5%	25.50	
2 francs (16 scallops).		1.50	Aluminum alloy	23.50	1.63
1 franc			75% copper, 25% nickel	21.00	
Do	15,000,000		Aluminum with 2.8%-4% magnesium.	21.00	
1/2 franc		.70	Aluminum alloy	16.00	1.63
Total	53,002,000				

¹ 1977 coinage, made by the French Government Mint, Paris, was dated 1977.

SAN MARINO

	Denomination	Coinage in 1977 ¹	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
		Pieces	Grams		mm.	mm.
1000	lire	180,000	14.60	"Argento" (835 silver, 165 copper).	34.40	2.04
500	lire	180,000	11.00	do	29.00	2.10
100	lire ²	1,131,600		"Acmonital" (Steel containing 18% chrome).	27.80	2.00
50	lire	180,000	6.25	do	24.80	2.00
20	lire	180,000	3.60	"Bronzital" (92% copper, 6% aluminum, 2% nickel).	21.30	1.50
10	lire	180,000	1.60	"Italma" (96.2% aluminum, 3.5% magnesium, 0.3% manganese).	23.30	1.65
5	lire	180,000	1.00	do	20.20	1.50
2	lire	180,000		do	18.30	1.45
1	lira	1,180,000	.625	do	17.20	1.20
	Total	3,571,600				

¹ 1977 coinage, produced by the Italian Government Mint, bore 1977.

In addition, the following 1977-dated numismatic coins composed of 917 parts gold were struck:

Denomination	Number of	Gross weight	Diameter	Thickness	
	pieces	Grams	mm.	mm.	
5 scudi	16,000	15.00	28.00	1.04	
2 scudi	34,000	6.00	21.00	1.00	
1 scudo	35,000	3.00	16.00	.80	

These coins had reeded edges.

^{*}Reeded edge: 200, 50, and 20 francs. Smooth edges: 10, 5, 2, 1, and ½ franc coins.

n.a. Not available.

² Consists of an equal number of two types of 100 lire coins, designated "A" and "B" by the Italian Mint.

^{*}Lettered edge: 1,000, 500 lire. Reeded edges: 100, 50, and 2 lire. Smooth edges: 20, 10, 5, and 1 lire coins.

NOTE.—San Marino is the world's smallest republic, covering 24 square miles on three mountain peaks in Apennines mountains of northern Italy. It was founded about the fourth century. Italian coins also circulate.

SAO TOME AND PRINCIPE, DEMOCRATIC REPUBLIC OF

Denomination	Coinage in 1977	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Pieces	Grams		mm.	mm.
20 escudos		12.0	Pure nickel	30.0	2.12
10 escudos		12.5	720 silver, 280 copper	30.0	1.70
Do		9.0	75% copper, 25% nickel	28.0	2.00
5 escudos		7.0	650 silver, 350 copper	25.0	1.40
Do		7.0	75% copper, 25% nickel	24.5	1.90
21/2 escudos		3.5	650 silver, 350 copper	20.0	1.40
Do		3.5	75% copper, 25% nickel	20.0	1.30
l escudo		8.0	95% copper, 3% zinc, 2% tin.	26.0	1.80
Do		8.0	61% copper, 20% zinc, 19% nickel.	26.8	1.60
50 centavos		4.5	95% copper, 3% zinc, 2% tin.	22.5	1.40
Do		4.5	61% copper, 20% zinc, 19% nickel.	22.8	1.30
20 centavos		1.8	95% copper, 3% zinc, 2% tin.	16.0	1.20
10 centavos		1.8	do	16.0	1.10
Do			97.5% aluminum, 2.5% magnesium.	16.0	1.30
Total					

^{*}Serrated edges: 20, 10, 5, and 21/2 escudos. Smooth edges: 1 escudo, 50, 20, and 10 centavos.

Note.—The Democratic Republic of Sao Tome and Principe became independent on July 12, 1975.

SAUDI ARABIA

Denomination	Coinage in 1977 ¹	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
1 riyal	Pieces 10,000,000	11.90 6.10 3.00 6.30 5.00 4.00 2.50	75% copper, 25% nickeldo.	mm. 30.00 30.00 26.80 22.00 26.00 23.00 21.00 19.50	2.18 1.20 1.22 1.52 1.60 1.60
Total	10,000,000				

¹ 1977 coinage, produced by mints in the United Kingdom, was dated 1976-1396.

NOTE.—There are 20 girsh in one riyal, and 5 halala in one girsh. There are several Anglicized spellings of the Arabic units.

SENEGAL, REPUBLIC OF—See West African Monetary Union SEYCHELLES

Denomination	Coinage in 1977	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Pieces	Grams		mm.	mm.
1,000 rupees		15.98	916 gold	28.40	n.a.
10 rupees		18.14	925 silver	34.50	n.a.
Do		18.14	75% copper, 25% nickel	34.50	n.a.
5 rupees		15.00	925 silver	30.00	n.a.
Do		13.50	75% copper, 25% nickel	30.00	n.a.
1 rupee			do	30.00	1.88
50 cents		5.83	do	23.60	1.52
25 cents		2.92	do	19.00	1.65
10 cents		6.16	79% copper, 20% zinc, 1% nickel.	(1)	2.08
5 cents		.78	Aluminum alloy	(2)	1.70
2 cents		3.89	do	23.10	n.a.
1 cent			do	16.00	.91
Total					

¹ The 12-sided 10-cent coin is 21.1 mm. across flats and 21.9 mm. diagonally.

NOTE.—Seychelles gained full independence on June 29, 1976.

^{*}Milled edges: All denominations.

n.a. Not available.

²8 scallops with inner diameter 17.02 mm. and outer diameter 18.42 mm.

^{*}Milled edges: 1,000, 10, and 1 rupee, 50, and 25 cents. Smooth edges: 5 rupees, 10, 5, 2, and 1 cents. n.a. Not available.

SIERRA LEONE

Denomination	Coinage in 1977 ¹	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Pieces	Grams		mm.	mm.
10 leone		57.60	916 gold	38.60	n.a.
2 leone		13.50	75% copper, 25% nickel	30.00	n.a.
1 leone		50.61	916 gold	38.60	n.a.
Do			75% copper, 25% nickel	38.60	n.a.
Do	962	28.28	925 silver	38.60	n.a.
50 cents		11.66	75% copper, 25% nickel	30.00	n.a.
20 cents			do	22.92	1.64
10 cents		4.92	do	22.86	1.36
5 cents		2.49	do	17.78	1.14
1 cent		5.67	97% copper, 2.5% zinc, 0.5% tin.	25.48	1.23
¹/2 cent		2.84	do	20.19	.99
Total	962				

¹ 1977 proof coinage was made by mints in the United Kingdom, dated 1976. n.a. Not available.

SINGAPORE

	Denomination	Coinage in 1977 ¹	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
		Pieces	Grams		mm.	mm.
500	dollars		34.72	900 gold, 100 copper	34.50	2.60
250	dollars			do	28.42	2.24
150	dollars 2		24.88	916.7 gold, 83.3 copper	30.48	1.98
100	dollars		6.00	900 gold, 100 copper	19.40	1.55
10	dollars		31.10	900 silver, 100 copper	40.11	2.34
	Do 3	370,000	31.10	500 silver, 400 copper, 50	40.11	2.34
				nickel, 50 zinc.		
5	dollars			do	38.00	2.30
1	dollar	9,000		925 silver, 75 copper	33.32	2.34
	Do	361,000		75% copper, 25% nickel	33.32	2.39
50	cents	7,065,000		do	27.76	2.03
20	cents	13,362,000		do	23.60	1.78
10	cents	24,969,000		do	19.41	1.40
5	cents	10,020,000		do	16.26	1.02
	Do			99.5% aluminum	21.23	1.27
1	cent		1.94	97% copper, 2.5% zinc,	17.78	1.12
				0.5% tin.	. = = -	
	Do	14,004,000	1.74	90% steel, copper clad	17.78	1.12
,	Total	70,160,000				

¹1977 coinage by Chartered Industries of Singapore Ltd. The \$10 and silver \$1 coins were dated 1977. The cupronickel \$1, 20 and 10 cent pieces bore the year 1976, 1977, or 1978. The 50, 5, and 1 cent coins were partially dated 1978 and partially 1977.

² Coin minted in 1969 added to list at request of Board of Commissioners of Currency, Singapore, Jan. 2, 1979.

^{*}Milled edges: 10 and 1 leones, 50, 20, 10, and 5 cents. Smooth edges: 1 cent and ½ cent.

³ Consists of the following commemorative issues: 210,000 (10,000 proof) commemorating the 10th anniversary of the Association of Southeast Asian Nations, of which Singapore is a member, and 160,000 (10,000 proof) honoring Singapore harbor, the fourth most active in the world.

^{*} Milled edges: \$500, \$250, \$150, \$100, \$10, \$5, \$1, 50, 20, 10, and 5 cent coins. Smooth edges: 1 cent and aluminum 5 cent piece.

SOLOMON ISLANDS

Denomination	Coinage in 1977 i	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
1 1-112	Pieces	Grams	750/	<i>mm</i> .	mm.
1 dollar ²	1,500,000	13.30	75% copper, 25% nickel	30.00	n.a.
20 cents	3,000,000		do	28.50	n.a.
10 cents	3,600,000	5.66	do	23.60	n.a.
5 cents	1,200,000	2.83	do	23.60	n.a.
2 cents	2,400,000	5.18	97% copper, 2.5% zinc,	21.59	n.a.
			0.5% tin.		
1 cent	1,828,000	2.59	do	17.53	n.a.
Total	13,528,000				

¹ 1977 coinage, manufactured by mints in the United Kingdom, was dated 1977.

Note.—First distinctive coinage for the Solomon Islands. The Solomon Islands dollar is equal in value to the Australian dollar. The Islands became internally self-governing on Jan. 2, 1976, with full independence scheduled for July 7, 1978.

²7-sided coin.

^{*}Reeded edges: 20, 10, and 5 cents. Smooth edges: 1 dollar, 2, and 1 cent coins.

n.a. Not available.

SOMALI REPUBLIC

Denomination	Coinage in 1977 i	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
1 shillin	Pteces 10,020,000 5,040,000 20,000,000 7,500,000 42,560,000	3.80 1.40	75% copper, 25% nickel do	mm. 25.50 21.10 22.50 19.05	mm. n.a. n.a. n.a. n.a.

¹ 1977 comage; manufactured by mints in the United Kingdom, was dated 1976.

² 12-sided coins.

^{*}Reeded edges: 1 shillin and 50 senti. Smooth edges: 10 and 5 senti. n.a. Not available.

SOUTH AFRICA, REPUBLIC OF

Denomination	Coinage in 1977 ¹	Gross weight	Metallic composition	Diam- eter ²	Thickness and edge*
	Pieces	Grams		mm.	mmı.
Krugerrand 3	2,836,219	33.93	916 ² / ₃ gold, 83 ¹ / ₃ copper	32.70	2.36
2 rand 4	32,000		do	22.20	1.22
1 rand 4	47,260	3.99	do	19.50	.79
Do 5	19,000	15.00	800 silver, 200 copper	32.69	1.80
Do 5	29,870,562	12.00	Pure nickel	31.00	2.22
50 cents 5	10,215,245	9.50	do	27.84	1.75
20 cents 5	30,668,644	6.00	do	24.21	1.47
10 cents 5	28,870,157	4.00	do	20.70	1.35
5 cents 5	51,748,119	2.50	do	17.35	1.22
2 cents 5	45,135,000	4.00	95% copper, 4.5% zinc, 0.5%	22.45	1.14
			tin.		
1 cent 5	72,463,000	3.00	do	19.05	1.19
1/2 cent 5	10,039,000		do	16.30	1.12
Total	281,944,206				

¹ Made by South African Mint, Pretoria and dated 1977.

Note.—The monetary unit, the rand, is divided into 100 cents, and is equal to 10 shillings or one-half pound. South African coins circulate in Botswana, Lesotho, South West Africa, and Swaziland.

SOUTH WEST AFRICA—Coins of the Republic of South Africa circulate in South West Africa

SPAIN

Denomination	Coinage in 1977 ¹	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Pieces	Grams		mm.	mm.
100 pesetas		19.00	800 silver, 200 copper	34.00	2.08
Do			75% copper, 25% nickel	34.00	2.38
50 pesetas			do	30.00	2.25
25 pesetas	44,990,000	8.50	do	26.50	2.08
5 pesetas	154,327,000		do	23.00	1.85
2½ pesetas		7.00	90% copper, 10% aluminum	25.00	1.87
1 peseta	247,370,000	3.50	92% copper, 6% aluminum, 2% nickel.	21.00	1.55
50 centimos		1.00	96.5% aluminum, 3.5% magnesium.	20.00	1.25
10 centimos		.75	do	17.30	1.19
Total	446,687,000				

¹ The 1977 coinage, made at the Spanish Government Mint, was dated 1977.

² Mean diameters and thicknesses are of fillets from which coin blanks are punched. Law does not prescribe weight, diameter, or thickness.

³ Includes 8,500 proof coins.

⁴ Includes 20,000 proof coins.

⁵ Includes 19,000 proof coins.

^{*}Reeded edges: Krugerrand, 2 and 1 rand and 2, 1, and ½ cent coins. Smooth edges: All other denominations.

^{*}Lettered edges: 100, 50, and 25 pesetas. Serrated edges: 5, 21/2, and 1 peseta; 50 and 10 centimos.



Coinage of the Republic of South Africa



Coinage of the Republic of South Africa

SRI LANKA

Denomination	Coinage in 1977 ¹	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Pieces	Grams		mm	mm.
5 rupees (10 sided)		13.60	Pure mckel	31.91	n.a.
2 rupees (7 sided)	* * * * * * * * * * * * * * * * * * * *	13.50	75% copper, 25% nickel	30.00	n a.
1 rupee		7.13	do	25.40	1.60
50 cents		5.51	do	21.46	1.93
25 cents	3,600,000	3.24	do	18.03	1.60
10 cents (8 scallops)	• • • • • • • • • • • • • • • • • • • •	4.21	79% copper, 20% zinc, 1% nickel.	(2)	1.27
5 cents (square)		3.24	do	(3)	1.22
2 cents (8 scallops)	2,500,000	.78	Aluminum with 2.8%-4% nickel.	(4)	n.a
1 cent		.70	do	16.00	1.32
Total	6,100,000				

¹1977 coinage was produced by mints in the United Kingdom. The 25 cent coins were dated 1975, while the 2 cent pieces bore 1977.

NOTE.—Name of country changed from Ceylon to Sri Lanka on May 22, 1972.

ST. LUCIA AND ST. VINCENT-See Caribbean Territories, Eastern Group

SUDAN, REPUBLIC OF THE

Denomination	Coinage in 1977 ¹	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Pieces 1,137 9,267 9,522 200,000 160,000 500,000 1,000,000 3,790,000 2,868,000	Grams 33.44 35.00 28.28 22.45 15.50 10.00 5.00 2.00 3.00 5.00 3.24 4.16 3.24 3.20	900 gold, 100 silver	mm. 38.60 42.00 38.61 40.00 32.00 27.70 23.60 17.50 20.00 (³) (³) 21.20 (*) 21.20 (5) 16.00	mm. 2.49 2.87 2.75 2.10 2.10 1.89 1.30 0.95 1.10 1.15 1.15 1.10 1.15 1.10 1.10 1.1
Total	8,537,926				

¹1977 coinage for general issue was manufactured by the Sudan Mint. 1.868,000 5 milliemes were FAO coins. Coins were dated as follows: 100,000 50 piastres. 1977; 1,800,000 10 milliemes and 1,000,000 5 milliemes, 1975; all others, 1976.

² Diameter 23.11 mm. across and 20.96 mm. inside scallops.

^a Square with round corners, 21 46 mm. diagonally and 18.24 mm. across.

⁴ Diameter 18.42 mm, across and 17.02 mm, inside scallops.

^{*}Security edges: 1 rupee, 50 and 25 cents. Smooth edges: 5 and 2 rupees, 10, 5, 2, and 1 cent coins.

n.a. Not available.

² Gold and silver coinage, produced by mints in the United Kingdom, dated 1976, and believed to be part of the World Wildlife Conservation series.

³Twelve scallops, measuring 25.5 mm. across scallops, 24.3 mm. inside scallops.

⁴Twelve scallops, measuring 22.8 mm. across scallops, 21.8 mm. inside scallops.

⁵ Twelve scallops, measuring 20.2 mm. across scallops, 19.4 mm. inside scallops.

^{*}Milled edges: 50, 25, 10, 5, and 2 piastre coins. Smooth edges: 10, 5, 2, and 1 millieme coins.

SURINAM

Denomination	Coinage in 1977 ¹	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Pieces	Grams		mm.	mm.
100 guilders ²	14,749	6.72	900 gold, 100 copper	22.50	1.30
25 guilders °	5,503	26.00	925 silver, 75 copper	38.00	2.70
10 guilders ²	5,711	16.00	do	33.00	2.20
25 cents	2,000,000	3.50	75% copper, 25% nickel	20.00	1.50
10 cents	2,000,000	2.00	do	16.00	1.40
5 cents ³	3,800,000	1.20	97.25% aluminum, 2.5% magne-	18.00	1.75
			sium, 0.25% chrome.		
1 cent	10,000,000	.80	do	18.00	1.60
Total	17,825,963				

¹ 1977 coinage, manufactured by the Netherlands Government Mint, was dated 1976.

Previous issues of coins of Surinam also outstanding in 1977

Denomination	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
1 guilder 25 cents 10 cents 5 cents (square, rounded corners) Do 1 cent Do Do	3.60 1.40 4.20 4.00 2.50 2.50	720 silver, 280 copper	mm. 28.00 19.00 15.00 (¹) (¹) 19.00 19.00	mm. 2.00 1.70 1.10 1.80 1.40 1.40 1.40

¹ Across flats, 18 mm. Across corners, 21.3 mm.

SWAZILAND

Denomination	Coinage in 1977	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Pieces	Grams		mm.	mm.
1 lilangeni		11.66	75% copper, 25% nickel	30.00	n.a.
Luhlanga		n.a.	800 silver, 200 copper	32.50	n.a.
50 cents		8.76	75% copper, 25% nickel	28.50	n.a.
20 cents		5.55	do	25.20	n.a.
10 cents		3.63	do	22.00	n.a.
5 cents			do	18.50	n.a.
2 cents		2.79	97% copper, 2.5% zinc, 0.5% tin.	18.60	n.a.
1 cent		2.05	do	17.78	n.a.
Total					

^{*}Reeded edge: 1 lilangeni. Smooth edges: All other denominations.

² Commemorates first anniversary of Surinam's independence. All of the 25 guilders were proof; 4,749 of the 100 guilders were also proofs.

³ Square coin with rounded corners.

^{*}Reeded edges: 100 guilders, 25, and 10 cents. Smooth edges: 5 and 1 cent coins. Lettered edges: 25 and 10 guilders.

^{*}Lettered edge: 1 guilder. Milled edges: 25 and 10 cents. Smooth edge: 1 cent.

n.a. Not available.

NOTE.—Coins of South Africa circulate in Swaziland.

SWEDEN

Denomination	Coinage in 1977 ¹	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Pieces	Grams		mm.	mm.
50 kronor ²	1,880,569	27.00	925 silver, 75 copper	36.00	3.00
10 kronor			830 silver, 170 copper	32.00	2.20
5 kronor		18.00	400 silver, 500 copper, 50 nickel, 50 zinc.	34.00	2.58
Do	4,613,351	9.50	Clad coin: Outer layers 75% copper, 25% nickel bonded to a core of pure nickel.	28.50	2.00
2 kronor		13.30	75% copper, 25% nickel	31.00	2.42
1 krona	78,838,583	7.00	Clad coin. Outer layers 75% copper, 25% nickel, bonded to a core 97% copper, 3% nickel.	25.00	1.88
50 ore	11,393,444	4.50	75% copper, 25% nickel	22.00	1.61
25 ore	9,230,932	2.18	do	17.00	1.36
10 ore	47,656,660	1.44	do	15.00	1.14
5 ore		8.00	95% copper, 4% tin, 1% zinc.	27.00	1.93
Do	34,588,060	2.68	do	18.00	1.44
2 ore		4.00	do	21.00	1.61
1 ore		2.00	do	16.00	1.39
Total	188,201,599				

¹ The 1977 coinage was made by the Government Mint of Sweden. All 50 kronor coins bore the year 1976. Other coins were dated as follows:

	1973	1976	1977
5 kronor		2,147,970	2,465,381
1 krona	762,827	3,750,066	74,325,690
50 ore		2,144,846	9,248,598
25 ore	2,277,220	2,361,714	4,591,998
10 ore	4,177,330	3,477,750	40,001,580
5 ore	1,122,400	4,672,360	28,793,300

² Honoring the wedding of King Carl XVI Gustaf and Queen Silvia.

Previous issues of Swedish coins also outstanding in 1977

Denomination and type of edge	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Grams		mm.	mm.
5 kronor (reeded)	25.00	900 silver, 100 copper	36	2.80
5 kronor (smooth)		400 silver, 500 copper, 50 nickel, 50 zinc.	36	2.80
2 kronor (smooth)	15.00	800 silver, 200 copper	31	2.44
Do		400 silver, 500 copper, 50 nickel, 50 zinc.	31	2.42
1 krona (smooth)	7.50	800 silver, 200 copper	25	1.91
Do	7.00	400 silver, 500 copper, 50 nickel, 50 zinc.	25	1.88
50 ore (smooth)	5.00	600 silver, 400 copper	22	1.71
Do		400 silver, 500 copper, 50 nickel, 50 zinc.	22	1.61
50 ore (reeded)	4.80	75% copper, 25% nickel	22	1.80
25 ore (smooth)	2.42	600 silver, 400 copper	17	1.43
Do		400 silver, 500 copper, 50 nickel, 50 zinc.	17	1.36
25 ore (reeded)	2.40	75% copper, 25% nickel	17	1.46
10 ore (smooth)		400 silver, 600 copper	15	1.14
Do		400 silver, 500 copper, 50 nickel, 50 zinc.	15	1.14
10 ore (reeded)	1.50	75% copper, 25% nickel	15	1.21

^{*}See denomination column.

^{*}Reeded edges: 2 kronor and 1 krona. Smooth edges: 50 kronor, clad 5 kronor, 50, 25, 10, 5, 2, and 1 ore coins. Lettered edge: Silver 5 kronor coin.

SWITZERLAND

Denomination	Coinage in 1977 ¹	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Pieces	Grams		mm.	mm.
5 francs 2	2,861,290	13.2	75% copper, 25% nickel	31	2.55
2 francs	2,010,030	8.8	do	27	2.15
1 franc	6,019,030	4.4	do	23	1.60
½ franc	19,011,030	2.2	do	18	1.35
20 centimes	14,012,030	4.0	do	21	1.80
10 centimes	10,007,030	3.0	do	19	1.50
5 centimes	14,012,030	2.0	do	17	1.30
2 centimes		3.0	95% copper, 4% tin, 1% zinc.	20	1.35
1 centime	2,007,030	1.5	do	16	1.15
Total	69,939,500				

¹ 1977 coinage made by Swiss Federal Mint, bore the year 1977.

Previous issues of Swiss coins outstanding in 1977

Denomination	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
20 centimes	3.00	Pure nickeldodo	<i>mm.</i> 21 19	<i>mm</i> . 1.80 1.50 1.30

^{*}Smooth edges: 20, 10, and 5 centimes.

SYRIAN ARAB REPUBLIC

Denomination	Coinage in 1977	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
1 pound		5.00 3.50 4.00 4.20	Pure nickel do do do Brass 70% copper, 30% zinc Brass	<i>mm</i> . 27.00 23.50 20.30 21.00 19.00	mm. 1.50 n.a. n.a. n.a. 1.50 n.a.

n.a. Not available.

² Includes coins honoring Swiss educator and humanitarian Johann Heinrich Pestalozzi on the 150th anniversary of his death.

^{*}Lettered edge: 5 francs. Reeded edges: 2 francs, 1, and ½ franc. Smooth edges: 20, 10, 5, 2, and 1 centime coins.

^{*}Reeded edges: All denominations.

TANZANIA, UNITED REPUBLIC OF

Denomination	Coinage in 1977 ¹	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Pieces	Grams		mm.	mm.
1,500 shilingi 2		33.44	900 gold	34.00	2.49
50 shilingi 2		35.00	925 silver, 75 copper	42.00	2.87
Do ²	100		500 silver, 500 copper	42.00	2.87
25 shilingi ²		28.28	925 silver, 75 copper	38.61	2.75
Do ²	100	25.31	500 silver, 500 copper	38.61	2.75
5 shilingi		13.48	75% copper, 25% nickel	(3)	n.a.
1 shilingi	2,500,000		do	27.74	n.a.
50 senti		4.00	do	20.96	n.a.
20 senti	5,000,000	5.00	79% copper, 20% zinc, 1% nickel.	24.00	n.a.
10 senti 4	9,505,020	5.00	do	25.00	n.a.
5 senti		4.00	97% copper, 2.5% zinc, 0.5% tin.	22.48	n.a.
Total	17,005,220				

¹ 1977 coinage by mints in the United Kingdom. The 50 and 25 shilling were dated 1974. The remaining coins were dated 1977.

² Part of World Wildlife conservation series, calling attention to endangered species of wildlife.

^{3 10-}sided coin alternate milled and plain sides, measuring 31.4 mm. across flats and 33 mm. across corners.

⁴ Coin has 10 scallops.

^{*}Milled edges: 1,500, 50, 25, and 1 shilingi; 50 senti. Smooth edges: 20, 10, and 5 senti.

n.a. Not available.

THAILAND

Denomination	Coinage in 1977 ¹	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Pieces	Grams		mm.	mm.
Regular: 5 baht	2,937,000	12.00	3-layer composite: outer cladding, 75% copper, 25% nickel, bonded to a	27.00	n.a.
Do	3,464,000	9.00	pure copper core. 75% copper, 25% nickel	27.00	n.a.
1 baht	73,851,000	2	do	25.00	1.51
50 stangs	11,044,000		91% copper, 9% aluminum	23.00	1.48
25 stangs	16,292,000		do	20.50	1.20
Do	13,120,000	1	65% copper, 35% zinc	20.50	n.a.
10 stangs	730,000		91% copper, 9% aluminum	17.50	1.16
	440,000		dodo	15.00	1.10
5 stangs	250,000		90% tin, 10% copper	15.00	.98
1 stang	230,000	1.20	190% till, 10% copper	15.00	.70
Subtotal	122,128,000			·	
Commemorative: 2					
5,000 baht 3	5,000	30.00	900 gold, 30 silver, 70 copper.	30.00	n.a.
2,500 baht 4	100		900 gold, 100 silver	34.00	2.49
Do 5	5,000		900 gold, 30 silver, 70 copper.	27.00	n.a.
800 baht		20.00	do	30.00	1.75
400 baht			do	23.00	1.50
150 baht 6	350,000		925 silver, 75 copper	35.00	n.a.
100 baht 4	100		925 silver	42.00	2.87
Do 4	100		500 silver, 500 copper	42.00	2.87
Do 7	26,200		900 silver, 100 copper	38.00	n.a.
50 baht			do	40.00	2.05
Do			400 silver, 500 copper, 100 nickel.	38.00	n.a.
Do4	100	28.28	925 silver	38.61	2.75
Do4	100		500 silver, 500 copper	38.61	2.75
10 baht			800 silver, 200 copper	20.50	1.60
Do 8	3,985,000		Pure nickel	32.00	n.a.
5 baht ³	3,903,000		3-layer composite: outer	27.00	n.a.
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		cladding 75% copper, 25% nickel, bonded to a pure copper core.		
1 baht		7.50	75% copper, 25% nickel	27.00	1.51
Do 9	10,815,000		do	25.00	n.a.
Subtotal	19,089,700				
Grand total	141,217,700				

¹ Coinage was made by the Royal Mint of Thailand, except as noted in footnote 4. Dates on coins are: Cupronickel 5 baht B.E. 2515 (1972); 1 baht, B.E. 2517 (1974); 50, 25, 10, and 5 stangs, B.E. 2500 (1957); 1 stang coins B.E. 2485 (1942); clad 5 baht and copper-zinc 25 stangs B.E. 2520 (1977).

n.a. Not available.

² All commemorative coins were dated B.E. 2520 (1977) except for the 100 baht which bore the date B.E. 2418-2518 (1875-1975).

³ Commemorates the 50th birthday of King Bhumibol Adulyadej.

⁴ Part of the World Wildlife Conservation series produced by mints in the United Kingdom, bearing the date 1975. The 925 fine 100 and 50 baht coins were proof.

⁵ Commemorates the wedding of Crown Prince Vajiralongkorn and Princess Somsawali.

⁶ Consists of 96,000 coins honoring Princess Sirindhorn's graduation from the Chulalongkorn University, 204,000 coins honoring the royal wedding, and 50,000 FAO coins.

⁷ Commemorates the 100th anniversary of Thailand's Ministry of Finance.

^{*}Consists of 2,095,000 coins honoring the Princess' graduation and 1,890,000 coins commemorating the royal wedding.

⁹ Consists of 8,998,000 coins honoring the Princess' graduation and 1,817,000 FAO coins.

^{*}Reeded edges: All denominations, except the 900 silver 100 baht, 400 silver 50 baht, cupronickel 5 baht and copper-zinc 25 stangs coins which have smooth edges, and the clad 5 baht coins which have lettered edges.

TONGA

Denomination	Coinage in 1977	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Pieces	Grams		mm.	mm.
Commemorative coins:					
100 pa'anga			917 gold, 83 copper	30.00	1.85
75 pa'anga			do	26.00	1.85
50 pa'anga			do	23.50	1.50
25 pa'anga			do	20.00	1.00
20 pa'anga			Pure silver	62.00	5.25
10 pa'anga		62.00	do	50.50	3.50
5 pa'anga	• • • • • • • • • • • • • • • • • • • •	31.00	do	38.80	3.00
Subtotal					
Regular issue: 1					
2 pa'anga	12,000	42.12	75% copper, 25% nickel	45.01	3.30
1 pa'anga			do	38.74	2.72
Do	25,000	24.30	do	(2)	2.72
50 seniti ³	60,000	14.58	do	31.65	2.64
20 seniti	25,000	11.31	do	28.54	2.41
10 seniti	25,000	5.66	do	23.60	1.90
5 seniti	110,000	2.83	do	19.41	1.45
2 seniti		3.89	97% copper, 2.5% zinc, 0.5%	21.08	1.60
1 seniti		1.75	tin. do	17.53	1.14
Subtotal	257,000				
Total	257,000				

¹ Coins were produced by the Royal Australian Mint, Canberra, and dated 1978. Believed to be FAO food plan coins.

TRINIDAD AND TOBAGO

Denomination	Coinage in 1977 ¹	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Pieces	Grams		mm.	mm.
10 dollars 2	1,140	35.12	925 silver	42.00	2.89
Do	150	35.12	75% copper, 25% nickel	42.00	2.89
5 dollars 2	1,080	29.81	925 silver	40.00	2.31
Do	300	29.81	75% copper, 25% nickel	40.00	2.31
1 dollar	2,400	18.37	do	36.00	n.a.
50 cents	1,503,900	7.07	do	26.00	1.85
25 cents	7,206,900	3.53	do	20.00	1.63
10 cents	11,295,900	1.41	do	16.26	1.02
5 cents	12,030,900	3.24	97% copper, 2.5% zinc, 0.5% tin.	21.21	1.35
1 cent	15,650,900	1.94	do	17.78	1.14
Total	47,693,570				

¹ 1977 coinage was made for Trinidad and Tobago by the United Kingdom and The Franklin Mint and was dated 1977. Denominations from \$10 through \$1 produced by Franklin Mint; production of other denominations was allocated as shown below:

	Royal	Franklin
	Mint	Mint
50 cents	1,500,000	3,900
25 cents	7,200,000	6,900
10 cents	11,280,000	15,900
5 cents	12,000,000	30,900
1 cent	15,500,000	150,900

Proof coins.

² Rectangular coin measuring 47mm. by 27mm.

³ 12 sided.

^{*}Milled edges: All commemorative coins, 2 pa'anga, 20, 10, and 5 seniti. Smooth edges: 1 pa'anga, 50 seniti.

^{*}Milled edges: \$10, \$5, \$1, 50, 25, and 10 cents. Smooth edges: 5 and 1 cent pieces.

n.a. Not available.



Coinage of Trinidad and Tobago

TUNISIA

Denomination	Coinage in 1977 i	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Pieces	Grams		mm.	mm.
10 dinars	2,000	18.81	900 gold	28.00	n.a.
5 dinars		24.00	680 silver	35.00	n.a.
1 dinar			680 silver, 320 copper	32.00	n.a.
Do			Mixed metals ²	27.00	n.a.
1/2 dinar		6.00	do	25.00	n.a.
Do		12.00	Pure nickel	29.00	n.a.
100 millimes		7.50	69% to 72% copper, 31% to	27.00	n.a.
			28% zinc.		
50 millimes		6.00	do	25.00	n.a.
20 millimes		4.50	do	12.00	n.a.
10 millimes		3.50	do	29.00	n.a.
5 millimes		1.50	95.35% aluminum, 4% magne-	24.00	n.a.
			sium, 0.6% manganese, 0.05% copper.		
2 mıllimes		1.00	do	21.00	n.a
1 millime			do	18.00	n.a.
Total	2,000				

¹ 1977 coinage, manufactured by mints in the United Kingdom, was dated 1957-1977.

NOTE.—The Dinar is the monetary unit, divided into 1,000 millimes.

TURKEY

Denomination	Coinage in 1977 ¹	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Pieces	Grams		mm.	mm.
50 lira ²	25,002	9.00	830 silver	30.00	n.a.
5 lira ³	1,642,204	11.00	Stainless steel (17% chrome)	32.50	1.73
2½ lira		12.00	do	30.00	2.70
Do 3	21,498,204	9.00	do	30.00	1.64
1 lira	30,244,002	7.00	do	27.00	1.57
50 kurus	5,062,002	6.00	do	25.40	1.55
25 kurus	10,204,476	4.00	do	22.50	1.75
10 kurus			97% copper, 2.5% zinc, 0.5% tin.	21.00	1.50
Do	106,002	1.35	Pure aluminum	21.00	1.50
5 kurus			97% copper, 2.5% zinc, 0.5% tin.	17.00	1.30
Do	190,002	.90	Pure aluminum	17.00	1.50
1 kurus			97% copper, 2.5% zinc, 0.5% tin.	14.00	.85
Do	108,002	.40	Pure aluminum	14.00	1.00
Total	69,079,896				

¹ The 1977 coinage, made by the Turkish Government Mint, bears the date 1977.

Previous issues of Turkish coins also outstanding in 1977

Denomination	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
25 kurus	2.75	70% copper, 30% zincdodo	<i>mm</i> . 22.60 18.00 16.00	

^{*}Lettered edges.

² Alloy unknown.

^{*}Reeded edges: All denominations except the 10 and 5 dinars which had lettered edges. n.a. Not available.

² FAO coins.

³ Includes 25,000 FAO coins.

n.a. Not available.

^{*}Incuse lettered edges: 5, 2½ liras, 1 lira, 25, and 50 kurus. Smooth edges: 10, 5, and 1 kurus. Reeded edge: 50 lira.



Coinage of Turkey

TURKS AND CAICOS ISLANDS

Denomination	Coinage in 1977 i	Gross weight	Metallic composition	Dtam- eter	Thickness and edge*
	Pieces	Grams		mm.	mm.
100 crowns		12.44	500 gold	27.00	2.15
Do 2	3,459		do	33.00	1.98
50 crowns 3	2,903	9.00	do	25.00	1.70
Do		6.22	do	21.50	1.70
Do 2	2,408	55.08	925 stlver	50.00	3.05
25 crowns 4	2,185	4.50	500 gold	19.00	1.52
Do 3	12,842	43.74	925 silver	47.00	2.86
20 crowns ²	15,595		do	45.00	2.79
10 crowns 4	2,220	29.81	do	40.00	2.82
5 crowns 4	2,220	24.30	500 silver	38.00	2.74
1 crown 4	2,270	19.44	75% copper, 25% nickel	36.00	2.08
Total	46,102				

¹⁹⁷⁷ coinage was produced by the Royal Canadian Mint.

TUVALU

Denomination	Coinage in 1977 ¹	Gross weight	Metallic composition	Diam- eter	Thickness and edge *
	Pieces	Grams		mm.	mm.
50 dollars 2	74	15.98	916.6 gold	28.40	n.a.
5 dollars 2	2,401	28.28	925 silver	38.61	n.a.
1 dollar (9 sided)	1	16.00	75% copper, 25% nickel	33.00	n.a.
50 cents	1	15.55	do	31.64	n.a.
20 cents	1	11.31	do	28.50	n.a.
10 cents	1	5.65	do	23.60	n.a.
5 cents	1	2.83	do	19.41	n.a.
2 cents	1	5.18	97% copper, 2.5% zinc, 0.5% tin.	21.59	n.a.
1 cent	1	2.59	do	17.53	n.a.
Total	2,482				

¹⁹⁷⁷ coinage, manufactured by mints in the United Kingdom, was dated 1976.

NOTE.—The Tuvalu monetary system is based on the Australian dollar standard.

² Coins dated 1976 honoring Queen Victoria with four portraits of Her Majesty on the reverse.

³ Coins, commemorating the silver Jubilee of Queen Elizabeth II, were dated 1977.

^{*}This issue of proof coins was dated 1976.

^{*} Security edges: All denominations.

² The gold and silver coins commemorate the new colony, formerly known as the Ellice Islands.

^{*}Reeded edges: \$50, \$5, 50, 20, 10, and 5 cents. Smooth edges: 1 dollar, 2, and 1 cent coins. n.a. Not available.

UGANDA

Denomination	Coinage in 1977	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Pieces	Grams		mm.	mm.
5 shillings		13.50	75% copper, 25% nickel	30.0	3.00
2 shillings		11.66	do	30.1	2.31
1 shilling		6.67	do	26.0	1.80
Do		5.90	Cupronickel clad steel	26.0	n.a.
50 cents		4.50	75% copper, 25% nickel	22.0	1.78
Do		4.50	Cupronickel clad steel	22.0	n.a.
20 cents		9.72	97% copper, 2.5% zinc, 0.5%	28.4	2.18
			tin.		
10 cents		5.05	do	24.0	1.57
Do		4.50	Copper clad steel	24.0	n.a.
5 cents		3.24	97% copper, 2.5% zinc,	20.2	1.52
			0.5% tin.		
Do		2.90	Copper clad steel	20.2	n.a.
Total					

^{*}Milled edges: 2, and 1 shilling and 50 cents. Smooth edges: 5 shillings (7 lobes), 20, 10, and 5 cent pieces. n.a. Not available.

UNITED ARAB EMIRATES

Denomination	Coinage in 1977 ¹	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Pieces	Grams		mm.	mm.
1,000 dirhams 2	12,500	39.94	916.6 gold, 83.4 copper	36.02	n.a.
500 dirhams ²	13,450		do	28.40	n.a.
1 dirham	4,500,000	11.31	75% copper, 25% nickel	28.50	n.a.
50 fils	1,600,000	6.50	do	25.00	n.a.
25 fils	2,400,000	3.50	do	20.00	n.a.
10 fils		7.50	97% copper, 2.5% zinc, 0.5% tin.	27.00	n.a.
5 fils 3	3,200,000	3.75	do	22.00	n.a.
1 fil ³		1.50	do	15.00	n.a.
Total	11,725,950				

¹1977 coinage was struck by mints in the United Kingdom and bore the dates 1973–1393. The reverse designs on all denominations are similar, carrying the inscription "United Arab Emirates" in Arabic above and English below.

UNITED ARAB REPUBLIC-See Egypt, Arab Republic of

² Proof coins commemorating the 5th anniversary of the United Arab Emirates, dated 1971–1976.

³ For issue in connection with the FAO coin plan.

n.a. Not available.

^{*}Reeded edges: 1,000 and 500 dirhams.

Note.—Federation, United Arab Emirates, consists of Abu Dhabi, Ajman, Dubai, Fujairah, Sharjah, Umm al-Qawain, and Ras al Khaima.

UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND

Denomination	Coinage in 1977 1	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Pieces	Grams		mm.	mm.
Decimal coins:					
50 new pence ²	28,948,918		75% copper, 25% nickel	30.00	2.29
25 new pence 3	393,000		925 silver	38.61	2.00
Do	37,281,319	28.28	75% copper, 25% nickel	38.61	2.00
10 new pence	70,862,418	11.31	do	28.50	2.31
5 new pence	51,402,418	5.65	do	23.60	1.73
2 new pence	127,393,418	7.12	97% copper, 2.5% zinc, 0.5% tin.	25.91	1.80
1 new penny	274,462,418	3.56	do	20.32	1.52
1/2 new penny	236,474,418	1.78	do	17.15	1.12
Subtotal 4	827,218,327				
Pound-shilling-pence coins:					
Sovereign (1 pound).	4,997,000	7.99	916 ² / ₃ gold, 83 ¹ / ₃ copper	22.05	1.63
Subtotal	4,997,000				
Maundy money:5					
Fourpence	1,178	1.89	925 silver, 75 copper	17.63	1.02
Threepence	1,178		do	16.26	.94
Twopence	1,282		do	13.44	.89
Penny	1,178	.47	do	11.15	.69
					,,,
Subtotal	4,816				
Total	832,220,143				

¹ 1977 coinage was made by mints in the United Kingdom. Coins for general circulation were dated as follows: 6,650,000 50-pence were dated 1977, the balance 1976; the cupronickel 25-pence were dated 1977; 10 pence bore 1976; all 5 pence and 39,239,000 2 pence coins were dated 1975; 42,245,000 2 pence, 267,800,000 1 penny, and 55,200,00 ½ penny coins were dated 1977, the balances 1976. The gold sovereigns were dated 1977.

⁴ In addition to those segregated in footnote 1, includes proof coins of each decimal denomination, except 25 pence in quantities and dates indicated below. 1977 and 1972 dated 25 pence proof coins were also produced in the quantities indicated below.

Coin																						Dal		
45,309		 		 													 				 . 1	197	2	
18,568																								
24,011	 	 		 													 				. 1	197	4	
17,481		 	٠	 			 	,									 				 . 1	197	5	
25,199		 		 												 ٠	 			 ٠	. 1	197	6	
171,850		 		 			 						 ŀ		ı	 ı	 			ı	. 1	197	7	

⁵ Minted for special distribution of the Royal Maundy at Westminster Abbey on Maundy Thursday, dated 1977.

NOTE.—United Kingdom coins also circulate in: The Bahama Islands, Bermuda, the eastern group of Caribbean Territories, the Falkland Islands, Gibraltar, Guernsey, Guyana, the Isle of Man, Jamaica, Jersey, and Malta which have their own coins.

UPPER VOLTA, REPUBLIC OF-See West African Monetary Union

² The coin is 7-sided (an equilateral curve heptagon).

³ Coins commemorate Silver Jubilee of Queen Elizabeth II and bear years 1952-1977.

^{*}Plain edges: 50p, 2p, 1p, ½p, and all Maundy coins. Milled edges: 25p, 10p, and 5p. Milling of the edge of the sovereign has approximately 105 serrations, 7½ thousandths of an inch deep.

URUGUAY

Denomination	Coinage in 1977 ¹	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Pieces	Grams		mm.	mm.
New peso series: ² 5 new pesos ³		14.50	92% copper, 6% aluminum,	33.00	2.40
	7 260 000	11.00	2% nickel.	29.00	2.40
1 new peso 4 50 centésimos 4	7,360,000 9,800,000		do	25.00	2.40 2.00
20 centésimos 4	4,700,000		do	23.00	1.90
10 centésimos 4	12,700,000		do	18.50	1.50
5 centésimos 4	8,500,000		95% aluminum	22.00	2.30
2 centésimos 4	13,800,000		do	20.50	
1 centesimo 4	10,000,000		do	18.00	1.70
Subtotal	66,860,000				
Old peso series: 100 pesos 5		8.00	70% copper, 20% nickel, 10% zinc.	27.50	1.40
50 pesos		5.25	70% copper, 15% nickel, 15% zinc.	24.50	1.30
20 pesos		3.75	do	21.50	1.22
10 pesos		4.00	92% copper, 6% aluminum, 2% nickel.	23.00	1.24
Subtotal					
Total	66,860,000				

¹ 1977 coinage was manufactured by the Chilean Government Mint and was dated 1977.

VATICAN CITY

Denomination	Coinage in 1977 ¹	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Pieces	Grams		mm.	mm.
500 Vatican lire	160,000	11.00	835 silver, 165 copper	29.00	2.10
100 Vatican lire	819,200		"Acmonital" (Steel containing 18% chrome).	27.80	2.00
50 Vatican lire	600,000	6.25	do	24.80	2.00
20 Vatican lire	250,000	3.60	"Bronzital" (91.6% copper, 8% aluminum, 0.4% titanium).	21.30	1.50
10 Vatican lire	200,000	1.60	"Italma" (96.2% aluminum, 3.5% magnesium, 0.3% manganese).	23.30	1.65
5 Vatican lire	135,000	1.00	do	20.20	1.40
2 Vatican lire	135,000		do	18.30	1.45
l Vatican lira	135,000	.63	do	17.20	1.20
Total	2,434,200				

¹ 1977 coinage, made by the Italian Government Mint, was dated 1977.

²The new peso, equivalent to 1,000 old pesos, was established by Uruguayan Law #14,316 and Presidential Decree #427/75 and has been in use since July 1, 1975. Coins in the old peso series will be progressively withdrawn from circulation and replaced by new coins and bills.

³ Commemorates Bruno Mauricio de Zabala, founder of the city of Montevideo.

⁴ 12-sided coins.

⁵ Withdrawn from circulation Dec.1, 1977.

^{*}Smooth edges: Old 10 pesos, new 1 peso, 50, 20, 10, 5, 2, and 1 centésimos. Reeded edges: Other denominations.

^{*}Lettered edge: 500 lire. Serrated edges: 100, 50, and 2 lire. Smooth edges: 20, 10, 5, and 1 lira coins.













VENEZUELA

Denomination	Coinage in 1977 ¹	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
1,000 bolivars 2 500 bolivars 50 bolivars 2 25 bolivars 2 10 bolivars 5 bolivars 1 bolivars 1 bolivar 1/2 bolivar 1/2 bolivar 10 centimos 5 centimos 10 Centimos	Pieces 462 5,457 5,528 13,300,000 127,300,000 120,000,000 277,700,000 538,311,447	18.00 35.00 28.28 30.00 15.00 8.50 5.00 3.50 1.75 5.00 4.00 2.50	900 gold, 100 silverdo. 925 silver, 75 copperdo. 900 silver. Pure nickeldododododododododododo. 90% steel, copper clad	mm. 34.00 30.00 42.00 38.61 39.00 31.00 27.00 23.00 20.00 17.00 23.00 21.00 19.00 18.00	mm. 2.49 n.a. 2.87 2.75 3.15 2.71 2.00 1.70 1.40 0.90 1.65 1.52 1.17 1.20

¹The 25 centimos were produced by Vereinigte Deutsche Metallwerke and dated 1977. The 1 bolivar and 5 centimo coins, produced by mints in the United Kingdom, were dated 1977. The 5 bolivars, made by the Spanish Government Mint, were dated 1977.

n.a. Not available.

VIETNAM

Denomination	Coinage in 1977	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Pieces	Grams		mm.	mm.
10 piastres (10 dong) ¹		5.00	90% steel nickel clad	25.50	1.27
Do		5.50	75% copper, 25% nickel	25.50	n.a.
5 piastres (5 dong) ¹ .		4.00	90% steel nickel clad	24.50	1.09
1 piastre (1 dong)		4.00	75% copper, 25% nickel	22.50	n.a.
50/100 piastres		3.80	96.5% aluminum, 3.5% magne-	31.00	n.a.
			sium.		
Do		3.50	95% aluminum, 5% magnesium	31.00	2.36
Do (50 xu)			Aluminum	30.00	1.62
20/100 piastre		2.20	95% aluminum, 5% magnesium	27.00	2.06
10/100 piastre		1.30	do	23.00	1.70
Total					

¹ Coin has eight scallops.

² Part of the World Wildlife Conservation series drawing attention to endangered species of wildlife. Produced by mints in the United Kingdom and dated 1975.

^{*}Milled edges: 1,000, 500, 50, 25, 5, 2, 1, ½, and ¼ bolivars. Smooth edges: 12½, 10, and 5 centimos. Lettered edge: 10 bolivars.

^{*}Reeded edges: 10 and 1 dong coins. Smooth edge: 5 dong.

n.a. Not available.

WEST AFRICAN MONETARY UNION

[Etats de l'Afrique de L'Ouest which includes Benin, Ivory Coast, Niger, Senegal, Togo, and Upper Volta]

	Denomination	Coinage in 1977 ¹	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
		Pieces	Grams		mm.	mm.
500	francs		25.00	900 silver, 100 copper	37.0	2.75
	francs	9,355,000		Pure nickel	26.0	1.86
	francs	4,832,000	5.00	75% copper, 25% nickel	22.0	1.86
25	francs	3,288,000	8.00	92% copper, 6% aluminum, 2% nickel.	27.2	2.25
10	francs	9,050,000	4.00	do	23.5	1.61
	Do			91% copper, 9% aluminum	23.5	1.61
5	francs	16,840,000		92% copper, 6% aluminum, 2% nickel.	20.0	1.61
	Do		3.00	91% copper, 9% aluminum	20.0	1.61
2	francs		2.20	95% aluminum, 5% magnesium.	27.0	1.60
1	franc			do	23.0	1.54
	Do	14,700,000	1.65	Stainless steel	15.0	1.35
	Total	58,065,000				

¹ Made at French Government Mint, Paris. Coins were dated 1977.

WESTERN SAMOA

Denomination	Coinage in 1977 ¹	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
100 tala ²	Pieces 3,160	Grams 15.55	916.6 gold, 83.4 silver	<i>mm</i> . 28.50	<i>mm</i> .
1 tala ³	10,693	31.47	925 silver	38.74	3.05
Do 4	51,197		75% copper, 25% nickel	38.74 32.30	3.05 2.43
20 sene		11.31	do	28.50 23.60	2.41
10 sene			do	19.41	1.90
2 sene		3.24	97% copper, 2.5% zinc, 0.5% tin.	21.08	1.40
1 sene		1.75	do	17.53	1.14
Total	65,050				

¹1977 coinage, manufactured by the Royal Australian Mint, was dated 1977, except for 7,710 cupronickel 1 tala, which bore 1976.

NOTE.—Western Samoa's monetary unit, the Tala, is divided into 100 Sene.

^{*} Reeded edges: 500, 100, 50, and 25 francs. Smooth edges: 10, 5, 2, and 1 francs.

²Consists of 2,500 proof coins commemorating the Silver Jubilee of Queen Elizabeth 11, and 660 proof coins honoring the 50th anniversary of Charles Lindbergh's solo trans-Atlantic flight.

³ Consists of 6,171 Silver Jubilee and 4,522 Lindbergh proof coins.

⁴Consists of 26,701 Silver Jubilee and 16,786 Lindbergh uncirculated coins, as well as 7,710 uncirculated coins commemorating the XX1 Olympic Games.

^{*} Milled edges: 100 tala, 50, 20, 10, and 5 sene. Smooth edges: 1 tala, 2 and 1 sene.

WINDWARD ISLANDS, PACIFIC GROUP-See French Polynesia

YEMEN ARAB REPUBLIC

Denomination	Coinage in 1977	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
1 rial	Pieces	5.25 3.00 4.23 2.80	75% copper, 25% nickeldodo	<i>mm</i> . 28.00 24.00 20.00 23.00 21.00 15.00	

^{*}Reeded edges: 1 rial, 50 and 25 fils. Smooth edges: All other denominations. n.a. Not available.

YEMEN, THE PEOPLE'S DEMOCRATIC REPUBLIC OF

Denomination	Coinage in 1977 ¹	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Pieces	Grams		mm.	mm.
5 dinars	6,000	12.50	925 silver, 75 copper	30.62	n.a.
250 fils	30,000		75% copper, 25% nickel	30.62	n.a.
50 fils	2,000,000	9.07	do	27.74	n.a.
25 fils		4.54	do	20.96	n.a.
5 fils		4.50	79% copper, 20% zinc,	23.14	1.47
			1% nickel.		
Do		1.35	Aluminum	23.10	n.a.
2½ fils		.67	do	17.00	n.a.
1 fil		.78	97% aluminum, 3% magnesium.	19.81	n.a.
Total	2,036,000				

¹ 1977 coinage, manufactured by mints in the United Kingdom. The 5 dinars were proof coins dated 1977, the 250 fils were dated 1967–1977, and the 50 fils bore 1976.

NOTE.—The name of this area was changed from The People's Republic of Southern Yemen. The monetary unit remains the Southern Yemen Dinar, which is divided into 1,000 fils.

YUGOSLAVIA

Denomination	Coinage in 1977	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Pieces	Grams		mm.	mm.
10 dinars			70% copper, 18% zinc, 12% nickel.	30.00	1.68
5 dinars		6.75	do	27.50	1.75
2 dinars		5.00	do	24.50	1.55
1 dinar		3.80	do	21.80	1.45
50 paras		6.00	85% copper, 14.5% zinc, 0.5% aluminum.	25.50	1.57
20 paras		4.00	do	23.20	1.32
10 paras			do	21.00	1.25
5 paras			do	16.00	1.15
Total					

^{*}Milled edges: All denominations.

n.a. Not available.

^{*}Milled edges: 50 and 25 fils. Smooth edges: 5, 21/2, and 1 fils.

Previous issues of Yugoslavian coins outstanding in 1977

Denomination	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
50 dinar	4.00	91% copper, 9% aluminumdodo	<i>mm</i> . 25.50 23.20 21.00	

^{*}Milled edges: all denominations.

ZAIRE

Denomination	Coinage in 1977 ¹	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Pieces	Grams		mm.	mm.
100 zaires ²		33.43	900 gold	34.00	2.49
5 zaires 2	3,228	35.00	925 silver	42.00	2.87
2½ zaires²	3,200		do	33.61	2.75
20 makuta		13.00	75% copper, 25% nickel	31.00	2.20
10 makuta		9.00	do	28.00	2.00
5 makuta		6.50	do	25.00	1.50
1 likuta		1.25	97% aluminum, 3% magnesium	21.00	1.65
10 sengi		.70	do	16.99	1.50
Total	6,428				

¹1977 coinage, produced by mints in the United Kingdom was dated 1977, with the exception of 200 pieces of each denomination which bore 1975.

Note.—Prior to 1972 this country was known as the Democratic Republic of the Congo. The zaire is divided into 100 likuta (plural, makuta), and each likuta is divided into 100 sengi.

ZAMBIA (formerly Northern Rhodesia)

Denomination	Coinage in 1977	Gross weight	Metallic composition	Diam- eter	Thickness and edge*
	Pieces	Grams		mm.	mm.
1 kwacha		28.28	75% copper, 25% nickel	38.60	n.a.
50 ngwee (12 sided)		11.66	dodo	30.00	1.88
20 ngwee		11.31	60% copper, 20% nickel, 20%	28.50	2.26
			zinc.		
10 ngwee		5.66	do	23.60	1.88
5 ngwee		2.83	do	19.41	1.42
2 ngwee		4.67	97% copper, 2.5% zinc, 0.5% tin.	21.08	1.85
l ngwee		2.33	do	17.51	1.45
Total					

^{*}Milled edges: 1 kwacha, 20, 10, and 5 ngwee. Smooth edges: 50, 2, and 1 ngwee. n.a. Not available.

² Part of the World Wildlife Conservation series drawing attention to endangered species of wildlife. Includes 200 proof 5 and 2½ zaires.

^{*}Reeded edges: All denominations.

WORLD MONETARY UNITS IN 1977

The decimal system of money, with the monetary unit divided into 100 fractional units, prevails in each country except as noted. The form, capitalization, etc., of units and their symbols or abbreviations may vary from that shown according to custom, usage, type of machines used, or for other reasons. Plural forms regularly are made by adding the letter "s," except as noted]

Divisional (fractional) unit	Symbol or abbreviation	•			Cme	Ctv. Uses French and Spanish money.	ა დ	. B¢ . 1 dinar = 1,000 fils.		· u	
Divisional (Name	Cent	PulCentime	Centime	Qintar	LweiCentavo.	Cent	Cent	Poisha.	Centime	Cent
į	Symbol or abbreviation	\$	Af. CFA fr.	CFA fr.	DA	649	S See	B\$ BD	Tk. BDS\$	F or BF	<i>∽</i> !
Basic unit	Name	Dollar	AfghaniCommunauté Financière Africaine franc.	Communauté Financière Africaine franc.	Lek	K wanza Peso	Dollar	Dollar	Taka. Dollar		Dollar
Tagain Comment		United States of AmericaAfars and Issas (see Diibouti)	Afghanistan Africa, Equatorial States: Cameroun, Central African Empire, Chad,	Congo (Brazzaville), and Gabon. Africa, West (Monetary Union): Benin, Ivory Coast, Niger, Senegal, Togo, and Upper Volta	Albania	Andorra Angola, People's Republic of Argentina	Australia	Bahrain	BangladeshBarbados.	Belgium	Belize

Indian money is also in circulation. New monetary units issued Aug. 23, 1976; South African	money used previously. 100 stotinki=1 lev.	Symbol (\$) is placed between escudos and centavos, example: 1500.	Peso system introduced Sept. 29, 1975.	peso = 1,000 escudos. Yuan = 10 jiao = 100 fen.	1 c $\mathfrak{t}=1,000$ mils.
Chetrum Cents. Thebe. t	Centavo. Sen (sen) Stotinki Pya	Sen (sen) ¢ Cent ¢ Centavo	Cent ¢ Cent ¢ Centavo ¢	Jiao, Fen ¢ Cent ¢ Centavo c., ¢, or Ctv. Centime	Cent c Centimo ¢ Mil m Heller h
Ngultrum Peso Boliviano Pula	Cruzeiro		East Caribbean E.C.\$ Dollar. \$ Peso \$	Yuan	Dollar \$ Colón (Colones) C or ¢ Pound c£ Crown Kcs
Bolivia	Brazil Brunei Bulgaria Burma K Burmai		Caribbean Territories, Eastern Group: Ea Grenada, Montserrat, and five Associated States. Cayman Islands	China, People's Republic of Yorkina, Republic of (Taiwan) No Colombia.	Cook Islands

WORLD MONETARY UNITS IN 1977—Continued

Domod	Nelliains	Danish money used in Faroe Islands &	Formerly Afars and Issas;	independence granted June 21, 1977.	1 pound = 100 piastres = 1,000 milliemes.	Ethiopian Monetary and	Danking Froctamation 100, 3971 1976 dd., Sept. 21, 1976, changed basic monetary unit to hirr.	United Kingdom coins also circulate.	I'se metronolitan French coins		*For both singular and plural forms.	Danish money is legal tender in	Greenland.
Divisional (fractional) unit	Symbol or abbreviation	0		ctv or ¢	P.T. & Mill.	ct			¢ p. C or Cme.		Pf. P		↔
Divisional (fr	Name	Ore (ore)	Centime	Centavo	Piastre, millieme	Cent		Pence	Cent	Centime	Butut	Pence Lepton (lepta)	Centavo
iit	Symbol or abbreviation	Kr. or kr.	Dj. fr	RD \$	£.E. C or ¢	Br. \$			т т т	CFP fr.	DM	Dr.	Ò
Basic unit	Name	Krone (Kroner)	Djibouti franc	Peso Domincano	Pound Colones)	Birr		Pound	Dollar Markka (Markkaa) Franc	Colonies Francaises du Pacifique franc.	Dalasi Mark* Deutsche Mark* Cedi	Pound	Quetzal (Quetzales)
Ountry		Denmark	Djibouti, Republic of	Dominican Republic	Egypt, Arab Republic of El Salvador	Ethiopia		Falkland Islands	Finland France French Guadeloune, Guiana, and Mar-	tinique. French Polynesia: Austral, Leeward, Marquezas and Windward Islands;	and Tuamotu group. Gambia, The Germany, Democratic Republic of Germany, Federal Republic of	Greece Greenland	

		1 dinar=1,000 fils.		1 dinar = 1,000 fils.		1 dinar = $1,000$ fils.
	¢ of cio. ¢ Fill. aur. or au. p.	G. C		FLS.	ct.	
Pence	Cent Cent Fillér Eyrir (aurar) Paisa (paise)	Sen (sen) Dinar Fils (fils) Pence	New Fence Agora (agorot) Centesimo (centesimi).	Sen (sen) Rin Pence	Cent Chon or Jeon.	Fils (fils)
G 65	HKS Ft. kr. or Kr. Re. (Rs.)	Rp. RI. (RIs.) ID £	I.E. or Lit.		Sh.	IKD
Pound Peso Syli Dollar Gourde	Dollar Forint Króna (Krónur)	Rupiah Rial Dinar Pound	Lira (Pound) Lira (Lire)	Yen Pound	Shilling	Dinar
o ol	Hong Kong Hungary Iceland India.	Indonesia Iran Iraq Ireland, Republic of	Israel	Japan	Republic of	Kuwait

WORLD MONETARY UNITS IN 1977—Continued

Remarks		U.S. money is also legal tender.	Uses Swiss money.	At par with £ sterling. Previously known as Malaysian dollar and cents.	100 cents=1 pound; 10 mils=1 cent. 5 khoums=1 ouguiya.	Local coins and metropolitan French money circulate.	replaced francs from July 1974. Metica—Centimo system of currency introduced in 1975, year of Independence but conver-	sion to new system indefinitely delayed.
Divisional (fractional) unit	Symbol or abbreviation	LP or PL	Ö	Gt.		Cme		<u>ი. ი გ</u>
Divisional (fr	Name	Piastre	Centime	Avos Centime Tambala	Lari Cent, Mil Khoum Cent Centavo	Centime	Centavo	Paisa Cent Cent
iit	Symbol or abbreviation	L£ or LL R S	fr. or F	F W C	£M Re \$	NF C	Esc. or §	Re. NAF
Basic unit	Name	Pound South African rand Ollar (Liberian or United States).	Franc (Luxembourg or Belgian).	Pataca Franc Malgache Kwacha Ringgit	Rupee Mali franc Pound Ouguiya Rupee Peso	New Franc (French) Tukhrik	Escudo	Rupee
Country		Lebanon. Lesotho Liberia	Luxembourg	Madagascar, Democratic Republic of. Malawi Malaysia	Maldive Republic Mali Malta Mauritania, Islamic Republic of Mauritius Mexico	Mongolian People's Republic	Mozambique	Nepal

New Caledonia	Colonies Francaises du Pacifique franc.	CFP fr.	Centime		
New Hebrides	New Hebrides franc	NH fr.			
New Zealand	Dollar	€9	Cent	.c.	
Nicaragua	Cordoba	CS	Centavo	&	
Nigeria	Naira	Z	Kobo	Κ.	
Norway	Krone (Kroner)	Kr.	Ore (oere)	0	
Oman	Omani rial	ORI	Baiza		1 rial = 1,000 baizas.
Pakistan	Rupee	Rs.	Paisa (paisa)	Ps.	
Panama, Republic of	Balboa	B/.	Centesimo	&	U.S. money also circulates in Panama.
Papua New Guinea	Kina		Toea		New currency issued in March 1975
					to replace Australian dollars as legal
					tender in Papua.
Paraguay	Guarani (Guaranies)	5	Centimo	ctmo.	
Peru	Sol (Soles)	S/.	Centavo	ct.	
Philippines	Piso.	<u>a</u>	Sentimo	S.	Since 1967 fractional coins have been in-
					scribed in Tagalog national Philippine
					language.
Poland	Zloty	ZI.	Grosz	Gr.	
Portugal	Escudo	Esc. or \$	Centavo		Symbol (\$) is placed between escudos
Portuguese Timor	Escudo	Esc. or \$	Centavo		and centavos. (Example: 1500.)
		9			, Co.

WORLD MONETARY UNITS IN 1977—Continued

Remarks					1 riyal = 20 girsh = 100 halalas.	131/3 rupees=1 pound sterling.	Monetary system based on Australian dollar	Coinage inscribed in Afrikaans and English.	1 Sudanese pound = 100 piastres = 1,000 milliemes.	Coins of South Africa circulate.	
Divisional (fractional) unit	Symbol or abbreviation		n.a.			Cts	· · · · · · · · · · · · · · · · · · ·		ctmo. SL. cts. m/m	ct (cts)	C. P.S.
Divisional (fr	Name	Dirham	Cent Bani	n.a.	Centavo	Cent	Cent	Cent	Centimo Sri Lanka cent Piastre, millieme	Cent	Ore (ore) Centime
lit	Symbol or abbreviation	QDR CFA fr.	Rh \$ n.a. FRW. CFA fr		Esc. SR	Rs. Le.	S\$	Sh. So. R	Pta. (Pts.) SL. Rs. £S, LSd, or LS.	Sf	Kr. or kr. Fr. L.S.
Basic unit	Name	RiyalCommunauté Financiére Africaine franc	Dollar Leu Franc	Africaine franc.	Escudos	Rupee Leone	Dollar	Somali Shilling Rand	Peseta Sri Lanka Rupee Pound	GuilderLilangeni and	Krona (Kronor) Franc
Country		Qatar	Rhodesia	San Marino	Sao Tome and Principe	Seychelles	Singapore Solomon Islands Solomon Islands	South Africa, Republic of	Spain Sri Lanka Sudan, Republic of the	Swaziland	Sweden

The baht is sometimes referred to as the	1 Dinar = 1,000 millimes.	on Australian dollar. Federation consists of Abu Dhabi, Ajman, Dubai, Fujairah, Sharjah, Umm	al-Qawain, and Ras Al Khaima. The United Kingdom adopted the decimal system of currency on Feb. 15, 1971.	unit, is divided into 100 pence. New peso, equivalent to 1,000 old pesos, has been in use since July 1, 1975.		1 dông=10 Hào=100 Xu.	1 dinar = 1,000 fils	1Z = 100 k. 1 k = 100 s.	The decimal system of money was adopted Jan. 16, 1968, replacing the $\pounds/s./d$ system.	
Stg.	¢ M Krs.	ct.	Ċ			c/or c		k, s	п.	
Senti	Seniti (seniti) Cent Millime Kurus	Cent Kopek Fil	Pence	Centésimo	Centesimo (centesimi)	Centimo Higo, Xu Sene	Fils	Para (para) Likuta (makuta),	Ngwee	
sh.,shs. B, b	T\$ T&T\$ DT TL.	Sh.	c ₄ ;	\$Z	<u></u>	B. WS\$	S.Y.£	Din.	×	
Shilingi	Pa'anga Dollar Dinar Lira Crown	Shilling Ruble Dirham	Pound sterling	Peso	Vatican Lira (Lire)	Bolivar Dông Tala	Dinar	Dinar	Kwacha	
Tanzania, United Republic of	Tonga Trinidad and Tobago. Tunisia Turkey Turks and Caicos Islands.	riet Socialist Republics Emirates	United Arab Republic (see Egypt)	:	Vatican City	Venezuela Vietnam Western Samoa	:		Zambia	n.a. Not available.

Silver coins withdrawn from circulation in specified countries, calendar year 1977

Country	Nominal value in monetary unit of issuing country	Silver content 1
Morocco	68,560 Australian dollars. 204,304 Canadian dollars. 127,630 Finnish markkaa. 39,954,370 Deutsche Mark 1,731 Honduran lempira 4,740 Indian rupees 41,997,800 Japanese yen 305 Moroccan dirhams. 440 Netherlands guilders. 1 Philippine piso 1,272,000 Swiss francs	Fine ounces n.a. 30,179 5,845 1,798,024 626 172 38,887 17 25 1 119,183
Total ounces		1,992,959

¹ Approximate in some instances; not necessarily the actual amount of silver recovered or recoverable. n.a. Not available.

Estimated quantity of gold and silver consumed for industrial, professional, and artistic purposes in specified countries during the calendar year 1977

Country	Gold (fine troy ounces)	Silver (fine troy ounces)	Source and reference notes
United States	4,859,000	153,600,000	Gold: U.S. Government estimate by Dept. of the Interior, Bureau of Mines. Silver: Handy and Harman.
Argentina	11,667	3,208,334	Banco Central de la Republica Argentina.
Australia	n.a.	4,134,545	Official Government source.
Austria	98,317		Hauptpunzierungs-und Probieramt (Minting and Assay Office).
Belgium	312,000	40,200	Private source and Royal Mint of Belgium.
Bolivia	386		Banco Minero de Bolivia.
Canada	n.a.	n.a.	Statistics Canada.
Chile	n.a.		Central Bank of Chile.
Colombia	30,789	103,749	Mint House and Bank of the Republic.
Ecuador	6,109	n.a.	Banco Central del Ecuador.
Egypt	1,895,250	1,050,000	Mint House.
El Salvador	8,862	225	Cooperativa de Joyeros y Relojeros de San Salvador and Banco Central de Reserva.
Finland	n.a.	n.a.	Bank of Finland.
France	n.a.	n.a.	Ministère de l'Industrie du Commerce et de l'Artisanat.

Footnote at end of table.

Estimated quantity of gold and silver consumed for industrial, professional, and artistic purposes in specified countries during the calendar year 1977—Continued

_	Gold	Silver	
Country	(fine troy	(fine troy	Source and reference notes
	ounces)	ounces)	
Germany, Federal Republic	3,283,393	59,591,718	Bundesamt für Gewerblich Wirtschaft,
of.			Frankfort am Main (Federal Office
			for Industry and Crafts).
Ghana	n.a.		External Trade Statistics.
Guatemala	1,797	47	Records of Banco de Guatemala.
Guyana	n.a.		Statistical Bureau, Ministry of
Juyana	11.00.	11.01.	Economic Development.
Haiti	8,000	n.a.	National Bank of Haiti.
Honduras	85	******	Central Bank of Honduras
Indonesia	9,166	118.679	P.T. Aneka Tambang.
Italy	2,294		Italian Government Mint.
apan	n.a.		Ministry of International Trade
apan	11.0.	03,221,727	and Industry.
Korea	123,728	2 577 196	Ministry of Commerce and Industry.
Libya	130,500		Commercial Gold Section, Central Bank
510 y a	130,300	n.a.	of Libya.
Malaysia	25,373	n a	Bank Negara Malaysia.
Mexico	425,687		Central Bank of Mexico.
Morocco	162,082	3,320,701	Office des Changes.
Vetherlands	207,400	1 086 000	Director of Domestic Financial Affairs,
Netherlands	207,400	1,700,700	Ministry of Finance.
New Zealand	7,990	123.035	Department of Statistics; Mines
New Zealand	7,990	123,033	Department.
1:	2 540		
Nicaragua	2,548		International Department, Banco
	20.501	2 050 007	Central de Nicaragua.
Norway	38,581		Norwegian Mint.
Pakistan	51		Pakistan Mint.
Peru	7,030		Banco Minero del Peru.
Philippines	559,423		Bureau of Mines.
Portugal	n.a.		Casa de Moeda, Lisbon.
			Foreign Trade Statistics Yearbook.
South Africa, Republic of	476	,	South African Mint.
Spain	1,220,000	n.a.	Ministry of Commerce and Tourism,
			Directorate General for Domestic
			Commerce.
Surinam	8,783	n.a.	Centrale Bank van Suriname and
			Comptroller of Customs. Includes
			sales by the Centrale Bank and
			new production.
Sweden	115,453		Central Bank of Sweden.
Tunisia	22,780	n.a.	Foreign Bank Services, Tunisian
			Central Bank.
Turkey	n.a.		Turkish Government Mint.
Jnited Kingdom	1,701,544	32,200,000	Gold estimate compiled from submissions
			by members of the London
			gold market. Silver estimate:
			1977 ANNUAL BULLION REVIEW
			Samuel Montague and Co., Ltd.
Zaire	88,093	2,702,976	Department des Mines.
	De De		

n.a. Not available.

World production of gold by countries, 1975-77

[Troy ounces]

Country ²	1975 r	1976	1977 p
North America:			
Canada	1,653,611	1,691,806	1,717,008
Costa Rica	18,000	9,600	12,249
Dominican Republic	195,488	413,788	348,473
El Salvador ³	8,713	3,007	2,156
Honduras	2,520	2,280	2,481
Mexico	144,710	162,811	212,709
Nicaragua	70,281	75,855	65,764
United States	1,052,252	1,048,037	1,100,347
South America: Argentina	11,867	° 12,000	¢ 12,000
Bolivia	r 53,019	41,519	24,293
Brazil ⁴	172,038	158,246	e 170,000
Chile ³	130,651	129,143	112,736
Colombia	308,864	297,861	257,138
Ecuador	8,157	11,615	7,649
French Guiana	2,443	2,797	2,800
Guyana	18,067	15,651	11,899
Peru	78,796	80,730	96,227
Surinam	141	39	
Venezuela	18,326	16,506	17,490
Europe:			
Finland	22,216	26,299	27,392
France	47,004	50,991	° 50,000
Germany, Federal Republic of	2,116	2,456	e 2,380
Hungary	300	290	300
Portugal	11,446	10,036	8,694
Romania e	60,000	60,000 c 270,000	65,000
Spain	124,584 63,176	62,179	e 270,000 e 60,000
U.S.S.R.c	7,500,000	7,700,000	7,850,000
Yugoslavia	177,922	157,088	° 160,000
Africa:	177,722	157,000	100,000
Angola ^e	1,000	1,000	1,000
Burundi	368	426	e 450
Cameroon ³	96	251	182
Central African Empire ^e	529	400	100
Congo, Republic of the	528	482	¢ 400
Ethiopia	19,981	30,000	10,000
Gabon	4,207	3,086	2,572
Ghana ³	523,889	532,473	480,884
Kenya	r 98	37	89
Liberia	4,500	¢4,500	° 4,500
Madagascar, Democratic Republic of	158	° 160	76
Mali ^c	30	3,500	3,500
Mauritania	¢ 42,000	22,120	° 20,000
Nigeria	r 600,000	° 10	e 10
Rhodesia, Southern ^c	425	600,000	600,000 e 1,000
South Africa, Republic of	22,937,820	22,935,988	22,501,857
Sudan	¢300	° 300	¢ 300
Tanzania ⁵	48	10	500
Zaire ³	103,217	102,882	81,661
Zambia ⁶	¢ 8,500	10,955	7,845
Asia:	0,000	10,700	,,,,,,
China, People's Republic of ^e	50,000	50,000	60,000
Democratic Kampuchea ^e	500	1,000	1,000
India ⁵	90,826	100,696	91,758
Indonesia ⁷	74,954	85,690	64,466
Ingonesia	143,503	137,669	170,431
Japan ⁸		1/0 0001	180,000
Japan ^a	160,000	160,000	
Japan ⁸ Korea, North ^c Korea, Republic of ⁵		18,744	21,380
Japan ⁸ Korea, North ^c Korea, Republic of ⁸ Malaysia:	160,000 13,343	18,744	
Japan ⁸ Korea, North ^c Korea, Republic of ^s Malaysia: Peninsular Malaysia	160,000 13,343 2,484	18,744 3,574	4,306
Japan ⁸ Korea, North ^c Korea, Republic of ^s Malaysia: Peninsular Malaysia Sarawak	160,000 13,343 2,484 1,192	3,574 965	21,380 4,306 608
Japan ⁸ Korea, North ^c Korea, Republic of ^s Malaysia: Peninsular Malaysia	160,000 13,343 2,484	18,744 3,574	4,306

Footnotes at end of table.

World production of gold by countries, 1 1975-77—Continued

[Troy ounces]

Country ²	19751	1976	1977ր
Oceania:			
Australia	526,821	502,741	620,605
British Solomon Islands	804	e 600	372
Fiji	68,744	65,757	49,067
New Zealand ³	2,747	3,276	¢ 3,500
Papua New Guinea	611,356	668,014	739,730
Total	38,476,371	39,089,034	38,965,766

e Estimate. p Preliminary. r Revised.

¹ Unless otherwise indicated, production is on the basis of mine output.

²Gold is also produced in Bulgaria and Czechoslovakia, and probably in small quantities in Burma, East Germany, Guinea, Thailand, and several other countries. However, available data are insufficient to make reliable output estimates. Data are lacking in clandestine activities.

³ Figure reported as fine gold (i.e. almost pure).

⁴ Excludes unreported production from small placer mines, estimated at 150,000 ounces per year.

⁵ Figure reported as refined metal.

⁶ Chiefly contained in blister copper and refinery muds.

⁷ Excludes production of so-called "peoples" mines.

⁸ Refinery production from Japan was as follows: 1975–1,123,489 ounces; 1976–1,043,676 ounces; 1977–1,219,155 ounces. Source.—Bureau of Mines, U.S. Department of the Interior.

World production of silver by countries, 1 1975-77

[Thousands of troy ounces]

Country ²	1975 -	1976	1977 թ
North and Central America:			
Canada	39,695	41,199	42,758
Costa Rica ^e	3	2	
Dominican Republic	109	907	1,357
El Salvador	176	166	112
Haiti¢	(3)	(3)	
Honduras	3,802	2,964	3,210
Mexico	38,029	42,640	47,029
Nicaragua	324	204	153
United States	34,938	34,328	38,160
South America:			
Argentina	2,283	1,750	¢ 1,800
Bolivia	45,470	5,091	5,887
Brazil	235	e 5 240	e 240
Chile	6,263	7,287	° 7,650
Colombia 6.	88	106	100
Ecuador	37	52	43
Peru	37,527	35,579	30,100
Europe:			
Bulgaria ^e	800	900	800
Czechoslovakia ^e	r 1,190	1,190	1,190
Finland ⁵	744	773	813
France	1,502	2,806	c 3,100
Germany, Democratic Republic of control of c	r 1,800	1,600	1,600
Germany, Federal Republic of	1,079	1,026	¢ 97(
Greece ⁶	480	477	374
Greenland ^e	380	375	517
Hungary	r 32	32	39
Ireland	1,384	925	936
Italy 6	1,157	1,556	1,207
Polande 7	13,200	16,100	17,700
Portugal	25	27	25
Romania ^e	1,500	1,300	1,250
Spain	3,447	3,107	¢ 3,540
Sweden.	4,515	4,617	¢ 4,820
U.S.S.R.º6	43,000	44,000	45,000
Yugoslavia ⁶	5,412	4,631	4,694

Footnotes at end of table.

World production of silver by countries, 1 1975-77—Continued

[Thousands of troy ounces]

Country ²	1975 r	1976	1977₽
Africa:			· · · · · · · · · · · · · · · · · · ·
Algeria ^e	120	150	200
Kenya	re 20	¢ 19	19
Mauritania	e 26	32	e 8 26
Morocco	r 3,041	2,054	2,244
Rhodesia, Southern	r 169	117	114
South Africa, Republic of	3,084	2,821	3,130
South West Africa, Territory of c	r 1,400	1,100	1,300
Tanzania	(9)	(9)	c (9)
Tunisia	292	252	236
Zaire	2,291	2,472	2,730
Zambia 10	c 1,000	1,065	c 1,000
Asia:			
Burma	r 749	705	791
China, People's Republic of	r 965	965	965
India	83	102	425
Indonesia	1,033	1,086	790
Japan	8,733	9,299	9,646
Korea, Northe	1,600	1,600	1,600
Korea, Republic of	1,494	1,838	2,040
Philippines	1,620	1,481	1,622
Taiwan	6	100	68
Oceania:			
Australia	r 23,348	25,073	27,424
Fiji	26	20	15
New Zealand	٠2	1	3
Papua New Guinea	1,384	1,841	° 1,906
Total	r 303,112	312,150	325,475

e Estimate. p Preliminary. r Revised.

¹ Recoverable content of ores and concentrates produced unless otherwise noted.

²In addition to the countries listed Ghana, Thailand, and Turkey produce silver, but information is inadequate to make reliable estimates of output levels.

³ Revised to zero.

⁴Includes production by the State mining company (COMIBOL) plus the exports of medium and small (private sector) mines

⁵ Estimate includes 20,000 ounces of silver recovered from gold ores plus an estimated 220,000 ounces of silver recovered as a byproduct from lead.

⁶ Smelter and/or refinery production.

⁷ Series revised. Revised figures for 3 prior years: 1972–7,700,000; 1973–8,700,000; 1974–11,300,000.

^{*} Estimate based on declining output of copper ore.

⁹ Less than 1/2 unit.

¹⁰ Refined silver and silver contained in blister copper and refinery muds.

SOURCE.—Bureau of Mines, U.S. Department of the Interior.

World's monetary stocks of gold bullion and coin held at the end of calendar year 1977

Country or international monetary institution	Fine troy ounces	Value at U S \$42 22 per fine troy ounce ¹
	Thousands	Thousands
United States of America ²	277,544	\$11,719,000
Afghanistan	949	40,051
Argentina	4,184	176,661 329,929
Australia	7,649 20,995	886,413
Bahamas	10	435
Belgium	42,451	1,792.302
Bolivia	420	17,732
Brazil	16	694
Canada	22,007 2,411	929,136 101,794
Colombia	1,668	70,426
Costa Rica	73	3,095
Denmark	1,925	81,256
cuador	26	1,099
Salvador	501	21,150
thiopia	286	12,082 242
inland	905	38,196
Germany, Federal Republic of	118,295	4,994,430
Greece	3,730	157,481
Guatemala	507	21,401
laiti	10	410 1,260
ndia	2,773	117,068
ndonesia	169	7,123
ran (Mar. 20, 1978)	3,783	159,710
reland, Republic of	447	18,877
srael	1,164	49,160 891,254
apan ordan	21,110	34,046
Kenya	21	869
orea	147	6,213
ebanon	9,218	389,205
ibya	2,443	103,145
falaysia	1,738	73,370
Mexico	1,755	74,086 26,677
lepal	133	5,605
letherlands	54,357	2,294,953
Jetherlands Antilles	548	23,123
New Zealand	22	945
licaragua	26 571	1,091
ligeria	1,081	24,126 45,659
akistan	1,586	66,958
araguay	6	260
eru	1,003	42,346
hilippines	1,072	45,286
ortugal	24,108 3,081	1,017,851 130,094
audi Arabiaouth Africa, Republic of	9,729	410.754
pain	14,400	607,968
ri Lanka	11	465
urinam	148	6,232
weden	5,929	250,322
witzerland	83,277 644	3,515,952 27,180
yria	2,397	101.217
`unisia	150	6,331
urkey	3,531	149,087
Inited Kingdom	22,225	938,339
Jruguay	3,544	149,608
/enezuela	11,260	475,397
Vest African Monetary Union	90 260	3,813 10,959
daire	131,571	5,554,946

¹The monetary value of gold in the United States was U.S. \$42.22 per fine troy ounce on Dec. 31, 1977. The U.S. dollar was legally defined at 12.63157895 grains of gold nine-tenths fine.

² Consists of gold held by the U.S. Treasury.

³ Approximate.

Note.—Data in this table are restricted to stocks of gold coin and bullion reported to the U.S. Mint. Gold stocks are also held by a number of countries from which data are not available to the U.S. Mint.

World monetary stocks of silver bullion and coin held at the end of the calendar year 1977

		Exchange rate	Silver	bullion	Silver coin	Total silver
Country	Monetary unit	December 1977 ¹	Fine troy ounces	Value ²	Value ³	Value
			Thousands	Thousands	Thousands	Thousands
United States	Dollar	\$1.00000	4 39,360	\$185,226	n.a.	\$185,226
Afghanistan	Afghani	.02222	8,303	39,076		39,076
Austria	Schilling	.06473	1,149	5,406	\$495,605	501,011
Bahamas	Dollar	1.00000			6,154	6,154
Belgium	Franc	.02961	2,713	12,768	41,593	54,361
Bolivia	Peso-Boliviano	.05000	20	93	5,050	5,143
Brazil	Cruzeiro	.06231			638	638
Canada	Dollar	.91132	942	4,432	972,693	977,125
China, Republic of	NT Dollar	.02632	2,093	9,852	7	9,859
Colombia	Peso	.02624	253	1,191	41	1,232
El Salvador	Colon	.40000			2,208	2,208
Ethiopia	Birr	.47950	n.a.	335	12,091	12,426
Fiji	Dollar	1.14870			211	211
Finland	Markka	.24299	2,452	11,539	14,361	25,900
France	Franc	.20844	2, . 5 2	11,557	514,555	514,555
Germany, Federal	Deutsche Mark	.46499	5,428	25,544	919,239	944,783
Republic of.	Deutselle Mark	. 10177	5,420	25,544	717,237	744,703
Ghana	Cedi	.86960			n.a.	n.a.
Greece	Drachma	.02816	3,618	17,026	n.a.	17,026
Guatemala	Quetzal	1.00000	1,121	5,277	3,223	8,500
Haiti	Gourde	.20000			255	255
Honduras	Lempira	.50000			2,823	2,823
India	Rupee	.11712	67,504		2,020	317,671
Ireland	Pound	1.85460	· ·	317,071	1,714	1,714
Israel	Pound	.06499			2,354	2,354
Italy	Lira	.00114	n.a.	n.a.	n.a.	2,33 4 n.a.
Japan	Yen	.00415	3,399		283,416	299,410
Korea	Won	.00207	27	13,334		126
Lebanon	Pound	.33333			1,200	1,200
Luxembourg	Franc	.03036			455	455
		.42201				
Malaysia Mexico.	Ringgit		5 272	25 206	n.a. 23,021	n.a.
		.04406	5,373	25,286		48,307
	Dirham	.23111			8,283	8,283
Nepal	Rupee	.08000	4,537	21,352	45.555	21,352
Netherlands	Guilder	.42955	180	845	45,557	46,402
Netherlands Antilles.	Guilder	.55555			3,630	3,630
Norway	Krone	.19056	167	786	9,698	10,484
Pakistan	Rupee	.10069	40	188	49	237
Panama	Balboa	1.00000			100	100
Paraguay	Guarani	.00794			333	333
Peru	Sol	.00767			129	129
D1 11	Piso	.13552	117	551	12,764	13,315
Philippines	Escudo	.02476	117	551	13,566	13,313

Footnotes at end of table.

World monetary stocks of silver bullion and coin held at the end of the calendar year 1977—Continued

		Exchange rate	Silver	bullion	Silver coin	Total silver
Country	Monetary unit	December 1977 ¹	Fine troy ounces	Value 2	Value 3	Value
			Thousands	Thousands	Thousands	Thousands
Saudi Arabia	Riyal	.28531			n.a.	n.a.
Singapore,	Dollar	.42762			4,811	4,811
South Africa	Rand	1.15040	1,428	6,719	18,550	25,269
Sri Lanka	SL Rupee	.06427	3	13	78	91
Sweden	Krona	.21044	3,112	14,644	134,048	148,692
Switzerland	Franc	.48168	5,915	27,837		27,837
Thailand	Baht	.04902	287	1,352	6,631	7,983
Trinidad and Tobago	T & T Dollar	.41667			4,109	4,109
Turkey	Lira	.05143			1,585	1,585
United Kingdom	Pound	1.85460			11,128	11,128
Venezuela	Bolivar	.23296			67,393	67,393
Total			159,541	751,129	3,645,349	4,396,478

¹U.S. dollars per unit of foreign currency. For the following 21 countries, the average December 1977 exchange rates for foreign currencies are based on the daily rate certified to the Secretary of the Treasury by the Federal Reserve Bank of New York: Austria, Belgium and Luxembourg, Canada, France, Germany, India, Ireland, Italy, Japan, Malaysia, Mexico, Netherlands, Norway, Portugal, South Africa, Spain, Sri Lanka, Sweden, Switzerland, and the United Kingdom. For other countries they are the end-of-year rates as established with the International Monetary Fund.

²The U.S. dollar value of silver bullion is based on the daily New York open market quotations for the month of December 1977. The December 1977 average is U.S. \$4.70595 per troy ounce 999/1000 commercial fineness.

³ The U.S. dollar value for foreign silver coin is based on the nominal face value in the country of issue and the exchange rate shown.

^{*}Silver bullion held by the U.S. Mint.

n.a. Not available.



FAO Coin Issues

The following pages contain the listing of FAO national coins issued through December 1977 and illustrations of the coins, made available by the Food and Agriculture Organization of the United Nations, Rome, Italy.

259

FAO NATIONAL COIN ISSUES, THROUGH DEC. 31, 1977

Country and denomination	Coinage mint	Quantity issued	sued	Year	Metallic composition	Gross	Diameter	Thickness
	Comage of the control	Regular	Proof	coin	Metallic composition	weight	Diameter	edge
Africa West						Grams	mm.	mm.
50 francs	French Government Mint,	20,000,000	:	1972	75% copper, 25% nickel	2.00	22.00	11.86
Do	dodo	3,000,000		1974	op	5.00	22.00	11.86
Do	do	9000,000,9		9261	ор	2.00	22.00	11.86
1 dinar	Kremnica, Czechoslovakia	75,000,000	: :	1972	do	7.00	25.00	12.10 21.50
5 centimes	op	10,000,000	: :	1970 1973	Aluminumdodo	1.50	22.00	² 1.70 ² 1.70
banrain: 250 fils	Royal Mint, London	20,000	:	1969	75% copper, 25% nickel	15.00	32.00	1 2.40
1 taka	Chartered Industries,	1,000,000	:	1975	Cupronickel	00.9	26.00	n.a.
25 poisha	Singapore. Berlin, Germany	5,000,000	:	1974	Stainless steel	2.65	19.00	(3)
Do	dodo.	000,000,9	:	1975	op	2.50	19.00	E
D ₀ .	op	6,000,000		1976	do	2.50	19:00	ΞΞ
10 poisha	do	5,000,000		1974	Aluminum	2.00	24.00	(E)
Do	op	14,000,000	: :	1976	do	1.80	24.00	DO
Do	op	4,000,000		1977	do	1.80	24.00	© ©
Ďo	dp	3,000,000		1975	op	1.20	22.50	
Do	op	3,000,000	: :	1976	do	1.20	22.50	© ©
Bhutan: 30 ngultrums	India Government Mint,	14,000	:	2761	500 silver	25.00	39.00	E
15 ngultrums	Bombay. dodo.	30,000		1974	do	22.50	39.00	ĐĐ
10 chetrumsdo	op	4,000,000		1975		2.30	26.00	n.a.

											1	W	OR	RL	D	C	OI	NS	5										261
11.55	(2)	Ð (ĐĐ	Ξ	(c)	€	Ξ	Ξ	£	(2)	(2)	(2)	(2)	© (§	© 6	0) E		n.a.	11.80	11.80	(5)	Ξ		13.00		13.00	13.00	13.00
27.00	29.50	29.50	28.50	25.00	25.00	22.00	19.50	19.50	18.50	21.00	21.00	21.00	19.00	19.00	19.00	2.7.1	17.00		26.40	28.00	28.00	26.00	23.00		36.60		39.60	36.60	36.60
00.9	10.30	10.30	11.30	5.73	5.73	3.03	2.70	2.70	.70	2.69	2.69	5.69	2.21	2.21	12.21	177	1.77		00.9	8.00	8.00	7.00	4.00		28.28		28.28	28.28	28.28
95% steel, 5% nickel	Cupronickel	op	op	op	op	op	Bronze	op	Aluminum	Steel	ор	op	op	op	OD	000	op		Cupronickel	75% copper, 25% nickel	do	B	op		do		op	ф	ор
1968	9261	1977	1977	9261	1977	1976	9261	1977	1976	1975	9261	1977	1975	1976	1761	9261	1977		1975	1968	1971	1977	1977		1971		1971	1971	1971
:	:	:		:	:	:		:	•	:	:	:	:	:	:	•			:	•	:				2,000		2,000	2,000	2,000
25,000	166,000	266,000	300,000	1,500,000	250,000	1,500,000	3,000,000	250,000	15,000,000	44,500,000	134,267,000	85,360,000	31,400,000	18,754,000	100,000	18.355.000	100,000		20,000,000	2,000,000	2,000,000	1.200.000	1,000,000		13,500		30,000	13,000	13,000
Germany	Royal Mint, London	op	op	op	op	op	op		•	Rio de Janeiro	_			op	op	op	op		Rangoon	Royal Mint, London	фо	Kremnica. Czechoslovakia			Royal Mint, London		ор	op	do
Bolivia: I peso-boliviano	1 pula	Do	Do	25 thebe	Do	10 thebe	5 thebe	Do	1 thebe	5 centavos	Do		2 centavos	Do	D0	Do	Do	Burma:	1 kyat	10 francs	Do	Cape Verde: 2½ escudos	1 escudo	Caribbean, East:	Anugua: 4 dollars	Barbados:	4 dollars	4 dollars	4 dollarsFootnotes at end of table.

FAO NATIONAL COIN ISSUES, THROUGH DEC. 31, 1977—Continued

Thickness	edge	mm.	13.00	13.00	13.00	13.00	1 2.00	11.60	(2)	22.57	21.60	1.35
Dismeter	Diameter	mm.	36.60	36.60	36.60	36.60	31.50	25.00	28.50	36.07	00.61	35.00 35.00 35.00 27.00 25.00
Gross	weight	Grams	28.28	28.28	28.28	28.28	12.30	00.9	10.00	22.60	3.00	25.00 15.00 25.00 5.50 5.50 4.50
Metallic composition			Brass	do	do	do	ор	55% copper, 27% zinc, 18% nickel.	Nickel	75% copper, 25% nickel 800 silver, 200 other	95% copper, 4.5% tin, 0.5% zinc.	720 silver do. Cupronickel do. do. do.
Year	coin		1971	1971	1971	1971	8961	6961	1977	1970	6961	1973 1976 1970 1975 1975 1975
ned	Proof		2,000	2,000	2,000	2,000	•	:	:	5,000		
Quantity issued	Regular		13,000	13,000	13,000	13,000	\$00,000	10,000,000	200,000	80,000	2,000,000	50,000 50,000 50,000 2,000,000 1,000,000 2,000,000
Coinage mint			Royal Mint, London	ор	ор	do	do	Central Mint, Taipei	French Government Mint, Paris.	Royal Mint, Londondo.	do	Mint House, Cairo do do do do do
Country and denomination		Caribbean, East—Continued	Montserrat: 4 dollars	4 dollars	4 dollars	St. Vincent: 4 dollars	Ceylon: 2 rupees	I dollar	Comoros: 100 francs	Cyprus: 500 mils	epublic:	Egypt, Arab Republic of: 1 pound Do. 10 piastres Do. 5 piastres Do.

12.00	(2)	(2)	(2)	228	333	12.50	21.90	21.90	21.90 21.90 21.40 21.30	12.00	<u>(</u>)	2.6(3)(3)
21.00 21.00 21.00 21.00 18.00	17.00	17.50	17.15	32.00	22:00	35.56	29.00	29.00	26.00 26.00 22.10 19.90	24.00	44.00	4444
3.20 3.20 3.20 1.50 2.00	.57	1.90	1.78	8.00	4.00	19.00	9.88	9.88	7.50 7.50 4.00 2.75	5.67	35.00	35.00 35.00 35.00 30.00
BrassdodoAluminumdoBrassdododododododo	Aluminum	Bronze	97% copper, 2.5% zinc, 0.5% tin.	Cupronickel do do Nickel brass	Aluminum	75% copper, 25% nickel	do	70% copper, 18% zinc, 12% nickel	op op op	75% copper, 25% nickel	Silver (500 fine)	op op
1975 1976 1977 1973 1975	1977	1977	1974	1977	1977 1977	1970	1972	1975	1972 1975 1975 1975	1973	1974	1975 1976 1977 1973
	• • • •	:	•			5,000	•	:		:		25,444
10,000,000 10,000,000 5,000,000 10,000,000 10,000,000 5,000,000 5	35,000,000	3,000,000	11,500,000	2,500,000 6,000,000 4,000,000	7,000,000	200,000	000,009	1,200,000	1,500,000 4,000,000 12,000,000 16,000,000	4,400,000	82,053	64,822 41,683 26,141 64,377
do. ob do. do.	Royal Mint, Llantrisant	Royal Australian Mint, Camberra.	Royal Mint, London	Royal Mint, Llantrisantdodo		Royal Mint, London	U.S. Assay Office, San	:	op	do	India Government Mint Bombay	<u> </u>
10 milliemes Do. 5 milliemes Do. Do.	L'unopia. 1 cent	1 cent	Gambia: 1 Butut	20 pesos	1 peso	Guyana: 1 dollar	50 centimes	Do	20 centimes	50 centavos	50 rupees	Do. Do. 20 rupees Footnotes at end of table.

FAO NATIONAL COIN ISSUES, THROUGH DEC. 31, 1977—Continued

Country and denomination	Coinage mint	Quantity issued	pens	Year	Metallic composition	300	Dismotor	Thickness
	Colliago Illini	Regular	Proof	coin	Metallic Composition	weight	Diameter	edge
India Continued						Grams	mm.	mm.
10 rupees	India Government Mints, Bombay and Calcutta	406,350	3,046	1970	800 silver, 200 copper	15.00	34.00	12.15
Do	op	19,600	5,969	1971	op	15.00	34.00	12.15
Do	India Government Mint, Bombay,	63,730	14,952	1973	Silver (500 fine)	22.50	39.00	12.40
Do	op	65,432	:	1974	Cupronickel	25.00	39.00	Ξ
Do	фо	48,500	:	1975	do	25.00	39.00	Ξ
Do	do	41,670	7 2 2 4	1976	ор	25.00	39.00	£
\$0 paice	000000000000000000000000000000000000000	47.086.000	10 880	1971	00000000000000000000000000000000000000	25.00	39.00	E 8
20 paise	India Government Mints,	10,172,500	3,046	1970	92% copper, 6% aluminum,	4.50	22:00	11.85
1	Bombay and Calcutta.				2% nickel.			
Do	do	29,600	4,375	1971	op	4.50	22.00	11.85
I0 paise	ор	369,167,500	:	1974	Aluminum	2.30	26.00	42.25
Do	ор	142,500,000	:	1975	op	2.30	26.00	42.25
Do	do	50,000,000		1976	do	2.30	26.00	2.25
	ор	25,060,002	2,224	1977	op	2.30	26.00	2.25
5 paise	op	160,000,000		1976	op	1.50	22.00	2.35
ρο	India Government Mints, Bombay, Calcutta,	80,950,002	2,224	1977	op	1.50	22.00	2.35
Indonesia	Hyderabad.							
10 rupiah	Djakarta	286,360,000		1971	75% copper, 25% nickel	1.80	16.00	11.00
Do	ор	166,000,000	:	1974	Brass clad steel	4.00	22.00	21.60
S ruplah	ор	1 208,000,000	:	1974	Aluminum	3.10	28.50	21.78
20 rials	Imperial Iranian Mint,	5,000,000	:	9261	75% copper, 25% nickel	8.50	31.00	(E)
ć	lehran.	000		1011	-	C C	5	3
10 rials	op	150.000		1969	op	2,00	28.00	0 E
1 rial	do	8,605,000		1972	ор	1.75	18.50	11.10
Do	do	1,395,000	:	1973	op	1.75	18.50	1.10
Do	Ф.	1,000,000		1975	C C	1.75	18.50	11.10

* 2.40 n.a n.a	21.12	21.70	² 1.70 ² 1.70 ² 1.70	(2)	12.40	11.60	99.1.5	11.70	(0)	21.70	2170	12.50	0	(3)	91.
33.00 26.00 22.00	17.20	28.50	21.10	21.10	34.00	21.60	21.60	28.00	23.00	24.50	21.00	38.70	27.85	23.50	33.00
15.00	1.80	4.10	4.10	.70	17.00	4.16	4.16	9.50	4.49	90.9	3.50	28.30	8.00	4.00	10.00
Pure nickel	Bronze	Cupronickel	op	Aluminumdodo	75% copper, 25% nickel	70% copper, 18% zinc, 12%	do	Pure nickel	Cupronickel	92% copper, 6% aluminum 2% nickel.	ор	500 silver	Aluminum-bronze	op	Silver (800 fine)Bronze
1970 Pr 1975 C 1975	1977 B	1976 C		1975 A 1976	1969 75	1972 70	1973	1968 P	1976 C	1970 92	1970	1977 50 1977 C	1975 A	1975	1968 Si 1968 B
000,1	:				:	•		:	10,000	:	:	: :	:	:	27,000
500,000	700,000	3,000,000	5,000,000	15,000,000	000,09	0000,000,9	30,000,000	300,000	800,000	15,000,000	25,000,000	15,000	23,000,000	10,000,000	
		::	: : :	: :	:		: :	:	:		:				<u>.:</u> :
Royal Mint, Londondododo	Pobjoy Mint, United Kingdom.	Royal Mint, Londondodo	opop.	op	ор	Korean Mint, Pusan	do	Sherritt Mint, Canada	Royal Mint, London	French Government Mint, Paris.	op	Royal Mint, Llantrisantdodo	French Government Mint,	do	Order of Malta Mint, Rome.

FAO NATIONAL COIN ISSUES, THROUGH DEC. 31, 1977—Continued

Country and danomination	anonio O	Quantity issued	J Year	la la	Motollic commercition			Thickness
	Comage minit	Regular P	Proof coin	<u>.</u> =	inclaine composition	weight	Dialiferen	edge
						Grams	mm.	mm.
Morocco: 5 dirham	Royal Mint, London	500,000	1975		Cupronickel	12.00	29.00	n.a.
						3	00.02	06.1
5 centimes	do		1974	:	op	2.00	17.50	21.40
20 rupees	Kathmandu	50,000	2761		500 silver	15.00	33.00	(3)
10 rupees	op	538,850	1968		Silver (600 fine)	15.50	32.00	12.10
Do	op	38,529	19/4		250 silver	8.6	29.00	E 8
10 paise	op	2,017,168	1761		66% copper, 34% zinc	4.00	21.00	21.34
Ďo	do		2761		Brass	2.20	18.50	(2)
	op		1976		op	2.20	18.50	(2)
Nicaraona.	op	4,283,691			Aluminum	07.1	70.50	21.31
10 centavos	Roval Mint, London	2.000.000	1974		do	1.20	20.00	ε
5 centavos		2,000,000	1974		op	1.50	21.50	Ξ
Oman:				_				
10 baiza.	do	3,000,000	1975		Bronze	4.76	22.48	(2)
rakistan:	Dobieton Mint I chone	10 440 000	1074		1	071	2000	31 36
Do	rakistan Mini, Lanore	. 18,640,000 28,875,000	19/4		Aluminum		22.00	31.35
		43 755 000	1076			8.5	22:00 22:00 22:00	
Do	op.		1977		000	99:1	22.00	
5 paisa	do		1974	_	do	1.25	21.00	21.30
Do	do		2761	•	do	1.25	21.00	2 1.30
Do	op	58,255,000	9761	:	op	1.25	21.00	_
	ор		7761	-	op	1.25	21.00	_
2 paisa	op	3,600,000	1974	٠	op	1:00	19.50	_
Do	ор	4,020,000	1975	_	op	1:00	19.50	_
Do	do		9261		op	1:00	19.50	_
l paisa	op	14,230,000	1974	•	op	.75	17.00	_
Do	do	00000	1975	- : -	p	.75	17.00	
Do	op	<u> </u>	1976	:	do	.75	17.00	21.25
		02,760,0001	1 197	<u>:</u>		167.	1.00./1	57.1

						WC	ORL	D	COINS					267
13.20	11.35	11.35	(2)	12.00	12.00	32.60	(2)	21.60	⁽²⁾ ² 1.20	(2)		11.70	ВП	(1) 21 70 31.70 31.70 1 91
39.00	15.00	15.00	38.00	28.00	28.00	32.00	21.30	23.30	20.30	29.00	26.00 23.00 18.50 20.00 17.00	26.00	30.00	34.50 21.10 17.01 18.40 16.60
35.12	1.63	1.63	25.00	9.50	9.50	18.00	3.60	1.60	1.02	8.00	6.50 5.00 2.50 3.00 1.75	6.50	13.50	6.18 6.18 78 78 78 70
925 silver, 75 copper	3-layer composite: outer cladding, 75% copper, 25% nickel bonded to core of	pure copper.	500 silver	Cupronickel	op	800 silver, 200 copper	Aluminum bronze	96.2% aluminum, 3.5% mag-	nesium, 0.3% manganese. dodo	Cupronickel	do do Brass.	75% copper, 25% nickel	Cupronickel	Brass. Aluminum alloy. do. do.
1972	1973	1975	1976	1971	1971	1972	1975	1974	1976	1977	1977 1977 1977 1977 1977	1972	9261	1977 1977 1972 1975 1977
10,000	:		9,901	* * * *	: :	: :	•	•		2,500	2,500 2,500 2,500 2,500 2,500	: :	:	П.а. П.а.
70,000	2,000,000	1,000,000	23,826	2,000,000	52,300 51,700	30,000	1,290,697	1,270,000	790,697	200,000	300,000 750,000 1,000,000 1,500,000 2,000,000	500,000	20,000	n.a. 2,200,000 600,000 n.a. 2,350,000
United States Assay	U.S. Mint, Philadelphia	ор	Franklin Mint, United States	Polish Government	dodo	Royal Mint, Londondodo	Italian Government Mint,	volue.	op	German State Mint,	do	Pakistan Mint, Lahoredodo	Royal Mint, London	do ob ob ob
Panama: 5 balboas	2½ centésimos	Do	Philippines: 25 pisos	10 zlotych (fish)	Do (baby) Do (globe)	200 francs	20 lire	10 lire	5 lire	20 dobras	10 dobras 5 dobras 2 dobras 1 dobras 50 centimos	50 halala 25 halala Sierra I eone	2 leones	10 cents. 5 cents. Do. Do.

FAO NATIONAL COIN ISSUES, THROUGH DEC. 31, 1977—Continued

Country and denomination	Coinage mint	Quantity issued	ned	Year	Metallic composition	300		Thickness
	Comage	Regular	Proof	coin		weight	Diameter	edge
Cinganora.						Grams	mm.	mm.
5 cents	Chartered Industries of Singapore.	3,049,046	:	n.a.	99.5% aluminum	1.24	21.23	2 1.27
Solomon Islands: 1 cent	Royal Mint, Llantrisant	800,000	:	1977	Bronze	2.60	17.52	(2)
5 shillings	Royal Mint, London	10,020,000	1,000	1970	75% copper, 25% nickel	28.00	38.00	13.00
50 senti	op	5,040,000		1976	op	3.80	21.10	n.a.
5 senti	op	11,000,000	: :	1976	Aluminumdo	9: 8:	19.05	n.a. n.a.
Sudan: 50 piastres	Khartoum Mint	1,000,000	:	1973	75% copper, 25% nickel	22.45	40.00	12.10
Do	op	100,000		1977	do	15.50	32.00	Ξ
25 plastres	op	000 000	24,035	1968	op	15.50	32.00	12.10
	op	500,000		1976	op	8:51	23.60	DE
	op	500,000	:	9261	op	3.00	20.00	3
5 milliemes	op	3,000,000		1976	Brass	3.24	25.50	² 1.15
Do. Do.	op	9,000,000	: :	1973	zinc. doBrass	3.24	21.20	11.15 n.a.
J lilangeni	Royal Mint, London	100,000	:	1975	Cupronickel	11.50	30.00	£
10 cents.	op	1,500,000		1975	op.	3.63	22.00) © 6
1 cent.	qo	2,500,000	• • •	1975	do	2.05	17.80	
Syria: 1 pound	Sherritt Mint, Canada German State Mint, Karlsruhe.	200,000	: :	1968	Pure nickeldodo	7.50	27.00	11.50

WORLD COINS

n.a. n.a. n.a. 11.50	2.30	22.8	13.30	13.30 n.a.	22.64	22.41	06.11	11.45	11.45	n.a.	11.75	12.50	(2)	(2)
23.50 20.30 21.00 19.00	33.00	35.00 27.00 25.00	45.01	45.01 38.74 647.00, 27.00	31.65	28.54	23.60	19.41	19.41	17.53	32.00	32.00	28.00	23.50
3.00 3.00 3.00 3.00	13.60	26.00	42.12	42.12 23.98 24.30	14.58	11.30	5.66	2.83	3.89	2.59	12.63	18.00	10.00	8.00
do	75% copper, 25% nickel dodo	925 silver	ор	op	op	ob	op	op	Bronze.	ор	Pure nickel	680 silver, 320 copper	Cupronickel	op
1976 1976 1976 1971 1971	1971 1972 1973	1977 1972 1972	1975	7761 1975 7761	1975	1975	1975	1975	1977	1975	6961	1970	1976	1976
		: : :	•				:				•	:	•	
1,000,000 1,000,000 500,000 15,000,000 2,000,000	1,000,000 8,000,000 5,000,000	100,000 6,000,000 9,000,000	13,000	12,000	40,000	75,000	75,000	100,000	110,000	1,000,000	250,000	100,000	n.a.	n.a.
Sherritt Mint, Canada Cerman State Mint, Karlsruhe.	Royal Mint, Londondododo	Royal Mint of Thailanddodo	Royal Australian Mint,	dododo	op.	obob	do	op	op	ф	Sherritt Mint, Canada	French Government	Vereinigte Deutshe Metallwerke.	op
piastres piastres piastres piastres Do.	shilingi	150 baht 1 baht Do	nga: 2 pa'anga	Do. pa'anga Do.							I rinidad and Tobago: I dollar	I dinar	Do	½ dinarFootnotes at end of table.

FAO NATIONAL COIN ISSUES, THROUGH DEC. 31, 1977—Continued

		Quantity issued	saned	Year	Mesolli			Thickness
Country and denomination	Colliage Illini	Regular	Proof	coin	Metallic composition	weight	Diameter	and edge
T.11 Chav.						Grams	mm.	mm.
50 lira	Turkish Government Mint. Istanbul.	25,000	•	1977	900 silver	6.00	30.00	(1)
5 lira.	:	17,000	:	1976	Chrome/steel	11.00	32.70	Ξ
Do	:	25,000	•	1977	do	11.00	32.70	Ξ
2½ lira		200,000	:	1970	op	9.00	30.00	\$1.65
10 kurus	op	1,090,000		1971	97% copper, 2.5% zinc,	3.50	21.00	21.65
					0.5% tin.			
Do		200,000	:	1972	op	3.50	21.00	21.50
Do		10,000	:	1973	op	3.50	21.00	21.50
Do		605,000	:	1974	op	2.75	21.00	
D0	do	21,000	:	27.01	Aluminum	1.30	21.00	21.50
, Do	op	000,410,1		1970	op	1.30	21.00	2.1.50
Do		17,000	•	1976		P. 6	17.00	De
5 shillings	Royal Mint, I ordon	100,000	5,000	1968	75% copper, 25% nickel	28.00	38.00	13.00
5 fils	do	8,200,000	:	1973	Bronze	3.80	22.00	n.a.
1 fil.	op	4,000,000	:	1973	do	1.50	15.00	n.a.
1000 pesos	Chilean Government	200,000	:	6961	900 silver	25.00	37.00	\$ 2.60
Do	dodo	11,000	:	1969	Bronze	22.00	37.00	\$ 2.60
Vatican City: 500 lire	Italian Government	110,000		1968	835 silver, 165 copper	11.00	29.00	42.00
100 lire	Mint, Rome.	315,000	:	1968	Steel containing 18%	8.00	27.80	12.00
50 lire		190,000	:	1968	chrome.	6.25	24.80	1 2.00
20 lire	op	105,000	:	1968	92% copper, 6% aluminum, 2% nickel.	3.60	21.30	1.60
10 lire	do	110,000	:	1968	96.2% aluminum, 3.5% magnesium, 0.3% manganese.	1.60	23.30	21.60

				WOR	LD C
² 1.50 ¹ 1.40 ² 1.20	² 1.90 11.55 10.a.		(1)	11.75	21.90
20.20	30.00 24.50 22.50	24.00	30.00	27.50 24.50 21.80	31.00
.80	9.00 4.50 4.00	3.20 3.00 3.00 3.00	10.00	6.75 5.00 3.80	11.70
961 8961 9968 op.	1968 Nickel-clad steel	1974 Cupronickeldo	1976 70% copper, 18% zinc, 12%	1971do	1969 75% copper, 25% nickel
			•	: : :	
100,000	\$00,000 30,000,000 30,000,000	25,000 40,000 200,000 500,000	200,000	\$00,000 \$00,000 \$00,000	70,000
op	Hamburg Mint, Germany Stuttgart Mint, Germany German State Mint, Karlsruhe.	Royal Mint, Londondododo	Belgrade	ob	Royal Mint, Londondododo
5 lire. 2 lire. 1 lira. Vietnam:	20 piastres	Yemen Arab Republic: 50 fils. 25 fils. 10 fils. 5 fils.	10 dinars	5 dinars	50 ngwee Do

Milled edge.

²Smooth edge.
³Scalloped edge.

*Relief edge.

Note.—The Food and Agriculture Organization national coin issues presented in this table represent the first international coin issue in monetary history. The coins draw attention to the important challenges of our time: providing food, training, and work for a rapidly expanding world population.

SOURCE. - Food and Agriculture Organization of the United Nations, Rome, Italy

The coins have two purposes: (1) to serve as daily reminders, over the period of a generation, of the national and international efforts necessary to meet the challenge of world food development, and (2) to provide, through seigniorage, funds to help finance such development.

n.a. Not available.

r. Revised.

⁵ Incuse edge. ⁶ Rectangular.



Cape Verde





Comoros





Ethiopia



Egypt





Fiji



Guinea-Bissau





Iran





Isle of Man

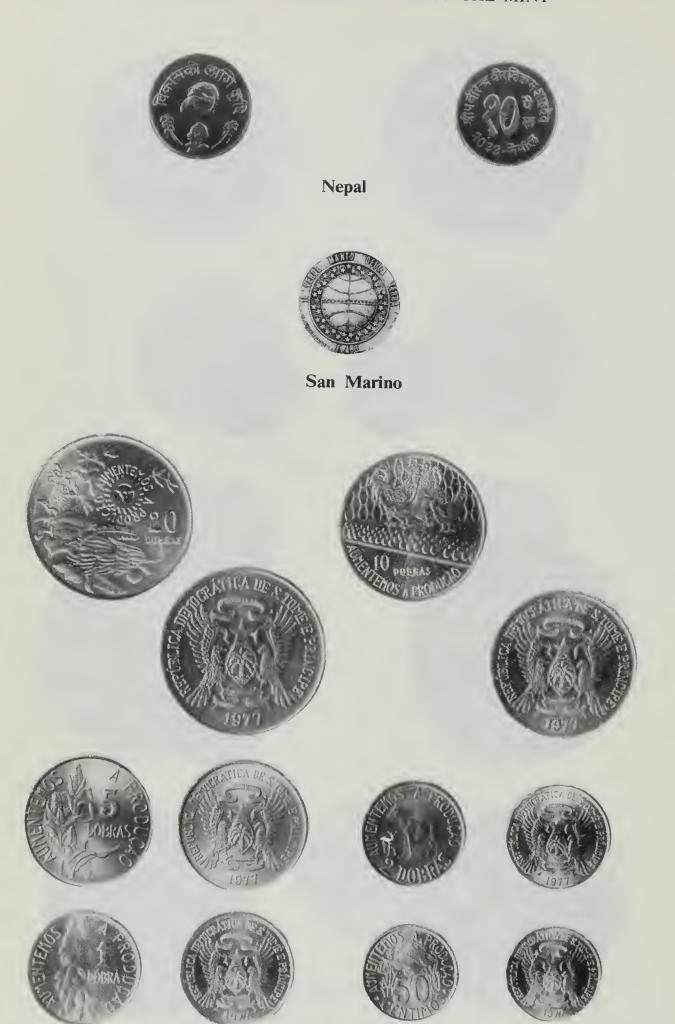








Maldives



San Tome and Principe













Seychelles





Solomon Islands





Sudan



Thailand





Tonga







Tunisia







Turkey



INDEX

\mathbf{A}	Dog
American Federation of Government Employees American Metal Market Annual Assay Commission, 1978 Assistant Director of the Mint for Technology, Alan J. Goldman: Statement, August 25, 1978, before the Senate Committee on Bank	00, 101, 100 9–10, 29
Housing and Urban Affairs	
C	
Coins and coinage, foreign:	
Bases of tables	115
FAO national coins issues	259–79
Government mints, World	110–1
Illustrations. See Illustrations, Coins of.	
Manufactured by U.S. Mints:	
1977 calendar year	
1978 fiscal year	
Summary by country and year through 1977	/8-9
Monetary units. See Monetary units, World.	116 24
Production and characteristics, details by country	
Summary, 1977 by country	
Coins and coinage, U.S.:	112–15
Anthony, Susan B. dollar	6-7 36-9
Designs, metallic composition, and specifications	
Distribution	
Forecasting and inventory control	/
Inventories, September 30, 1977, and September 30, 1978	
Kennedy half dollars. See Kennedy half dollars.	
Legislation. See Legislation.	
Location:	
Clad dollars, July 1971-September 1978	53
Fractional coins, June 1970–September 1978	52
Manufactured:	
1971–78, clad, subsidiary	
1977 calendar year	
1978 fiscal year	$\dots 7-8, 45$
Metals:	

 Consumed
 49, 76

 Strip sources
 8, 15

Coins and coinage, U.S.—Continued Numismatic. See Special coinage and medals. Proof. See Special coinage and medals: Coins.
Proposed smaller dollar
1-cent coin, improvements 9 Direct, under limited conditions 9, 16 Fiscal years 1976–78 50
Stock: September 30, 1978 8 Selected dates, June 1970–September 1978 52–3
Uncurrent, withdrawn, fiscal years 1977–78
Price quotations, 1974–78
D
Denver Mint
Director of the U.S. Mint, Stella B. Hackel: Nomination and confirmation
Electrolytic refinery, Bureau of the Mint, production, gold and silver 14, 70 Engelhard Minerals & Chemicals Corp
${f F}$
FAO national coin issues. See Coins and coinage, foreign: FAO national coin issues.
Financial operations: Financial Management Information System
Fort Knox Bullion Depository

G

Gold (see also Gold and Silver): Bullion:	
Stocks: Held by Mint institutions World monetary, 1977	
Transactions:	
1977 calendar year	80–1
1978 fiscal year	
Continuing audit	
Medallions, proposed	
Monetary value, legal, since 1792 Price quotations, daily, U.S.:	88
1933–34	
1978	· · · · · · · · · · · · · · · · · · ·
Produced by electrolytic refinery, Mint, fiscal year 197 Production, World, by country, 1975–77	
Sales	
Theft	6
Gold and silver (<i>see also</i> Gold; Silver): Issues for industrial, professional, and artistic use:	
United States, 1975–78	88
Worldwide, 1977	
Mine production by States, recoverable, 1974–78	
Н	
TT 1 0 TT	
Handy & Harman	88, 90, 91, 94–6
Handy & Harman	88, 90, 91, 94–6
I	88, 90, 91, 94–6
Illustrations:	
I Illustrations: Anthony, Susan B. dollar	
I Illustrations: Anthony, Susan B. dollar Coins of:	7
I Illustrations: Anthony, Susan B. dollar Coins of: Argentina	7
I Illustrations: Anthony, Susan B. dollar Coins of: Argentina Austria	
Illustrations: Anthony, Susan B. dollar Coins of: Argentina Austria Bangladesh	
I Illustrations: Anthony, Susan B. dollar Coins of: Argentina Austria Bangladesh Bolivia	
Illustrations: Anthony, Susan B. dollar Coins of: Argentina Austria Bangladesh	
Illustrations: Anthony, Susan B. dollar Coins of: Argentina Austria Bangladesh Bolivia Cape Verde, Republic of Comoros, Republic of Czechoslovakia	
Illustrations: Anthony, Susan B. dollar Coins of: Argentina Austria Bangladesh Bolivia Cape Verde, Republic of Comoros, Republic of Czechoslovakia Dominican Republic	
Illustrations: Anthony, Susan B. dollar Coins of: Argentina Austria Bangladesh Bolivia Cape Verde, Republic of Comoros, Republic of Czechoslovakia Dominican Republic	
Illustrations: Anthony, Susan B. dollar Coins of: Argentina Austria Bangladesh Bolivia Cape Verde, Republic of Comoros, Republic of Czechoslovakia Dominican Republic Ecuador Egypt, Arab Republic of	
Illustrations: Anthony, Susan B. dollar Coins of: Argentina Austria Bangladesh Bolivia Cape Verde, Republic of Comoros, Republic of Czechoslovakia Dominican Republic Ecuador Egypt, Arab Republic of Ethiopia	
Illustrations: Anthony, Susan B. dollar Coins of: Argentina Austria Bangladesh Bolivia Cape Verde, Republic of Comoros, Republic of Czechoslovakia Dominican Republic Ecuador Egypt, Arab Republic of Ethiopia Fiji	
Illustrations: Anthony, Susan B. dollar Coins of: Argentina Austria Bangladesh Bolivia Cape Verde, Republic of Comoros, Republic of Czechoslovakia Dominican Republic Ecuador Egypt, Arab Republic of Ethiopia	
Illustrations: Anthony, Susan B. dollar Coins of: Argentina Austria Bangladesh Bolivia Cape Verde, Republic of Comoros, Republic of Czechoslovakia Dominican Republic Ecuador Egypt, Arab Republic of Ethiopia Fiji	
Illustrations: Anthony, Susan B. dollar Coins of: Argentina Austria Bangladesh Bolivia Cape Verde, Republic of Comoros, Republic of Czechoslovakia Dominican Republic Ecuador Egypt, Arab Republic of Ethiopia Fiji Finland Gambia, The Guatemala Guinea-Bissau, Republic of	
Illustrations: Anthony, Susan B. dollar Coins of: Argentina Austria Bangladesh Bolivia Cape Verde, Republic of Comoros, Republic of Czechoslovakia Dominican Republic Ecuador Egypt, Arab Republic of Ethiopia Fiji Finland Gambia, The Guatemala	

	Page
Illustrations—Continued	
Coins of—Continued	
	165, 167
*	
•	
•	
<u>e</u>	210
•	Republic of
•	
	221–2
· · · · · · · · · · · · · · · · · · ·	
<u> </u>	
	232, 279
	237
Director of the Mint Stella B. Hackel	4
Medals:	1111
	Earl Warren 11, 40, 70
· · · · · · · · · · · · · · · · · · ·	hal 12
Secretary of the Treasury Blumenthal w	orth Director Hackel 4
K	
V	
Kennedy half dollars	47
Thomas in a control of the control o	
L	
Legislation	6-7, 27
M	
Medals:	
Assay Commission, 1977	11 28 20
Chief Justices of the Supreme Court	
"List" available for sale	
Miniature Presidential series	
President Carter	
Produced fiscal years 1976–78	
Secretary of the Treasury Blumenthal .	
Metals (see also Specific metals):	
Coinage	08 103

Maria () C 'C 'C	Page
Metals (see also Specific metals):—Cont	
	and coinage, U.S.: Metals consumed.
	ng gains and losses
	87–103 he Interior 87, 88, 253, 254
Mint, Bureau of the:	Te Interior 87, 88, 233, 234
,	
	3, 6
	age, U.S.: Manufactured)7-8
•	
	5-6
Supplemental coinage and storage f	facilities 6, 15, 16, 24
	110–11
Monetary units, World, 1977	
	N
NI NI I A OCC	4.5.7.14.15.74.75.70.0
New York Assay Office	
Nichal.	70, 71–2, 73, 74, 80, 81, 83
Nickel:	
Numismatic services. See Special coinage	
Trumismatic services. See Special comag	c and medals.
	P
Philadelphia Mint	4, 5, 7–8, 9, 15, 45, 55–60, 63, 64, 65, 68–9,
Timaderpina Wint	70, 71–2, 73, 74, 75, 77, 80, 81, 83
	R
Regulations revocation Receptoring	melting, or treating 1-cent coins 8, 34–5
regulations, revocation. Recepporting,	mering, or treating reent coms o, 3 r 3
	S
San Francisco Assay Office	5, 8, 17, 45, 46, 62, 64, 65,
out Function Fisher Office	68–9, 70, 71–2, 73, 74, 75, 80, 81, 83
San Francisco Mint. Old (see also San Fr	rancisco Assay Office) 16, 62,
	71–2, 74
Secretaries of the Treasury:	
· · · · · · · · · · · · · · · · · · ·	VIII
Mint medal series	55-6
Seigniorage	
Silver (see also Gold and silver):	
Bullion:	
Stocks:	
Transactions:	
· · · · · · · · · · · · · · · · · · ·	82
1078 fiscal year	67

Pa	age
Silver (see also Gold and silver):—Continued	
Price quotations, New York:	
1874–1978, annual extremes and averages	97
1977 daily spot 94	-5
1978 daily spot	96
Produced by electrolytic process, Mint, fiscal year 1978	70
Production, World, by country, 1975–77	-4
Summary, receipts, issues, and balances, Mint, fiscal years 1934–78	66
Special coinage and medals (see also Medals):	
1977 Assay Commission Medal	29
Bicentennial coins and medals	75
Coins	41
Exhibits:	
American Numismatic Association convention	29
Old San Francisco Mint	16
Philadelphia Mint	15
T	
*	
Treasury Payroll/Personnel Information System (TPPIS)	17
U	
Uncirculated coin sets. See Special coinage and medals: Coins.	
Under Secretary of the Treasury Bette B. Anderson	34
W	
West Point Bullion Depository	73,
74, 75, 77,	83
World's Monetary Stocks of Gold, Silver, and Coins, 1977 (see also Coins and coinage, foreign; Gold; Gold and silver; Illustrations: Coins; Monetary units, World; Silver)	79
Z	
Zinc:	
Price quotations, 1973–78	03



